PUNJAB DISTRICT GAZETTEERS
VOLUME XXIV—A

ATTOCK DISTRICT

PART A

WITH MAPS

1930

COMPILED AND PUBLISHED UNDER THE AUTHORITY OF THE
PUNJAB GOVERNMENT

Lahore
Printed by the Superintendent, Government Printing, Punjab

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PREFACE TO SECOND EDITION.

THE first edition of the Gazetteer was written in 1906 and published in 1907, at a time when the four tahsils, which had been cut off from Jhelum and Rawalpindi to form a new district, had hardly found themselves as an entity. This is reflected in the general arrangement followed by my predecessor, who described the tahsils from Tallagang upwards instead of, as now, from Attock downwards.

I have had to alter the order of description in parts: and I have also taken out from the "Historical" Section and transferred to the "Places of Interest" material which in the Gazetteer as re-arranged falls more appropriately there. Otherwise I have retained as much as I could of the original, in the hope that the development of the district may be the more clearly depicted.

The new Gazetteer contains three features which will be of more than local interest.

The first is the note on the "Pindigheb Find," an epoch-making discovery of Lieutenant Todd, R.I.M., to whom my readers and I are greatly indebted for his clear note on the great discovery made by him during a recruiting tour.

The next is the account of the early history of the Chhachh, which I owe to the kindness of Sir John Marshall, Sir Aurel Stein, and Rai Bahadur Daya Ram Sahni, a kindness I most gratefully acknowledge.

Lastly is the note on oil production for which I have to thank the Attock Oil Company.

Finally, I would express my acknowledgments to the Sardars and people of the district, among whom and with whom and for whom it has been an inspiration to work in the beautiful country which is their home.

RAWALPINDI:
The 4th November 1930.

C. C. GARBETT.

CHAPTER I.—DESCRIPTIVE.

Section A.—Physical Aspects.

General Description.

Attock District, which takes its name from the famous ford and fort at the north-west corner of the district, a name accorded to it by the Emperor Akbar, has an area of 4,223 square miles, and lies between 32° 32′ and 34° north latitude, and 71° 17′ and 73° 5′ east longitude. It consists of the western portion of the rough plain country lying between the Indus and Jhelum rivers and under the mountains of Hazára. The real Sind Ságar Doáb stops short of the Salt Range, which runs east and west from about Kálabágh on the Indus to near Pind Dádan Khan on the Jhelum. North of this range the Doáb is continued in the rugged upland plain country, which includes the famous Pothwár tract, and stops short below the hills of Hazára and Murree. This rough northern Doáb is divided between the three districts of Jhelum, Ráwalpindi and Attock. The Attock portion is a strip along the eastern bank of the Indus, broadening out at places to east and south till it extends almost half way across to the Jhelum.

CHAP. I. A.

Physical Aspects.

It is perhaps the most picturesque of all the plains districts, presenting every variety of scenery. Travel by boat from Attock to Makhad, and as you pass through the gorges, you might be on the Rhine. At Bágh Niláb, looking across the expanse of waters, where the Haro meets the flooding Indus, to the green clad slopes of the Kála Chitta rising rapidly to its full 3,000 feet, you might be in Scotland. The Chhachh, particularly when all is fresh and green and scudding clouds deepen patches across its face, has a beauty of its own. The road from Basál to the Kála Chitta running through the preserved jungle forest, passing through winding valley and hill, is a fascinating medley of jungle, dale and mountain views. On the northern half of the Tallagang Tahsil you can gallop over undulating downs for twenty miles at a stretch. On the southern half, and in the centre of Fatehjang and Pindigheb, you have a bleak ravine-scattered terrain, fierce and forbidding. The range of the Kála Chitta offers as delightful a camping ground as the heart could wish. But perhaps what holds the memory longest is the ruined village of Attock, the dominating fort, the old serái: the place where hill and river meet, and the Indus roars as the sea, and the sunrises and sunsets are ever changing and ever beautiful.

BOUNDARIES.

CHAP. I. A.

Physical Aspects.

On the west the boundary for over 80 miles is the Indus, across which lie the Pesháwar and Kohát Districts of the North-West Frontier Provinces and the Isa Khel Tahsil of the Mianwali District. The remainder of the western boundary marches with the Mianwali Tahsil of Mianwali District. Across the southern boundary lies the Khusháb Tahsil of Shahpur. The Chakwál Tahsil of Jhelum and the Gujar Khan and Ráwalpindi Tahsils of Ráwalpindi adjoin the district on the east. The northern boundary is to the east hills, to the west, for thirty miles, the Indus. Across the hills lies the Haripur Tahsil of Hazára, and beyond the Indus, the Mardán Tahsil of Pesháwar..

DIVISIONS.

The district forms part of the Ráwalpindi Division. In shape it is not unlike a skull and neck, facing west, with a bite out of the upper part of the back of the head. The greatest length from north to south is 96 miles, and the greatest breadth 72 miles.

This large tract is divided into four tahsils. Tahsil Attock occupies the whole of the northern end, as it were the forehead of the skull, down to a line across the bridge of the nose. Tahsil Tallagang is a square block at the southern end, as it were, the neck. Tahsil Pindigheb to the west and Tahsil Fatehjang to the east divide the central portion of the district. These administrative divisions correspond fairly closely with the natural divisions.

Attock Tahsil.

Tahsil Attock is divided off from the rest of the district by the Kála Chitta hills, at the northern foot of which the Haro river runs till it falls into the Indus. It includes all the country between that range and the hills of Hazára with the exception of a few villages to the east included in Tahsil Fatehjang. In character it differs from all other portions of the district, and is not itself homogeneous in nature. Three well-defined and quite distinct tracts are included in it known as the Chhachh, the Sarwála, and the Nálá Circles.

Chhachh plain.

The Chhachh plain lies to the north-west, centring about Hazro and containing the most fertile and richest portion of the district. On the north and west it is bounded by the Indus, and on the east by the Gandgarh hills running down almost due south from Hazára. In the south it is shut in by a steep slope, the edge of a bank of pure sand which runs across the western half of the tahsil from east to west. It is a perfect example of what the

CHAP. I, A. Physical Aspects. Chhachh plain—*contd.*

Persians call "*Kaf-i-dast,*" a plain, that is, as the palm of a hand. This Chhachh plain must at one time, before the Indus cut its way through the Attock hills, have formed, with the greater part of the Swábi Tahsil of the Pesháwar District, a vast lake. Tradition even now speaks of it as a marsh, and the older inhabitants affect to derive the name Chhachh from the word Chhab, which is said to mean a marsh.

Certainly the old villages are mostly raised above the surrounding country on eminences, and as late as 1835 the traveller, Baron Hugel, who came to Attock from Hassan Abdál, wrote as follows :—

> " There is not a single tree on the plain of Attock, which is as level as a sheet of water. Ruinous villages are situated on eminences artificially thrown up, like those of the Egyptian delta. The Indus frequently inundates (*sic*) the whole plain, though not with the same regularity as the Nile. Shujánpore (the place is presumably Shamsabád) is a wretched place by the side of a rivulet (the Chel), with morasses in its immediate vicinity. The view would be splendid, were the plain well cultivated; as it is, however, the scene is devoid of interest, and one only feels surprised at the endless range of mountains seemingly one above the other."

Great havoc was wrought by the flood of 1841, when whole villages were swept away with enormous loss of life and cattle, and the plain then may well have resembled the picture drawn by the traveller. But it is as difficult to believe that there was not a single tree on the plain, as it is certain that the plain is not as 'level as a sheet of water'. Down the mountains and slopes that hem it in, run numerous water-courses, some of which used to fall direct into the Indus, while others fed the Chel rivulet that forms the principal drain of the tract as a whole. The slope of the land towards the Indus being gradual, the natural course of the Chel is winding, and the bed tended to silt, and increased the occasional morasses of Baron Hugel's time into what was for the first quarter of this century the huge Hatti Jhil. This swamp, however delightful to the sportsman, destroyed the health and the cultivation of the neighbouring villages. So high did the water level rise, that in certain seasons of the year wells literally overflowed. A medical census taken in the autumn of 1924 of the school children of Bahadur Khan, one of these villages, showed that 99 per cent. were suffering from spleen, itself the aftermath of malaria.

The villagers were encouraged to drain off to the Chel the stagnant waters that surrounded their dwellings, and Govern-

CHAP. I, A. — Physical Aspects. Chhachh plain—*concld.*

ment undertook a comprehensive scheme both for the regulation of the storm waters from the Gandgarh hills, which were headed by a four mile *band* and turned by a northerly cut into the Indus, and also for the drainage of the Chel area by improving the course of the Chel and by digging several miles of feeder drains. These works were completed in 1928: and have added ten square miles of rich alluvial soil, comparable to that of the Mesopotamian delta, to the cultivated area of the district.

Sarwála.

From the crest of the ridge which fringes the southern edge of the Chhachh plain the country runs right away down to Campbellpur, the head-quarters station, in a desert of waterless sand some five or six miles in length. Beyond Campbellpur, a strip of firmer land runs down to the Haro river, across which the country, stony and unproductive at best and everywhere gashed by numerous ravines, rises to the Kála Chitta Range of hills. This strip is known as the Sarwála. The portion north of Campbellpur, which is all waterless sand, contains no human habitation, and the railway, which once tried to follow the crest of the ridge, was driven in 1899 by want of water to strike down to Campbellpur, and climb thence back to Attock. The villages which own this piece of country have their sites either just to the south of the Chhachh plain, where the land begins to rise on the north side of the ridge, and where the Grand Trunk Road is aligned, or on the line of Campbellpur on the southern side of the ridge, where water can be tapped. All these villages are spread out in long narrow strips some five or six miles in extent. South of Campbellpur and north of the Haro the soil is rather less sandy and water is nearer. Across the Haro the soil becomes firmer and is capable of producing better crops, but is far more liable to drought. The country is everywhere very broken, and becomes more stony as the hills are approached.

Nála Tract.

The rest of the tahsil, the eastern portion, along with the villages of Fatehjang Tahsil north of the Kála Chitta Range, forms the Nála tract. Imagine a level plain. Dot it with meaningless barren hills, the spurs and offshoots of the Gandgarh Range. Streak it with equally meaningless ravines and streams, coming now from the Gandgarh mountain, now from its offshoots, now from the Margalla Range, and now from the hills of the Kála Chitta. Through it all twist and turn the river Haro in every direction. It is a country of sudden and constant surprises. All along the northern boundary the country is very much broken.

On the whole poor, the best villages are to be found in the Panj Katha, a tract irrigated by mountain streams on their way

to the Haro. Then comes the broken and hilly country round Wáh and Hassan Abdál, shot through by the Kandháripur, Lundi and Kherimár hills; then a bewilderment of hills and ravines and the Saggar well tract; ending in a waterless sandy waste on the borders of the Sarwála. **CHAP. I, A. Physical Aspects.** Nála Tract—*concld.*

The southern portion of this tract is a comparatively open plain, sloping south from the Haro up to the Kála Chitta Range, and including the northern corner of Tahsil Fatehjang. The soil is of limestone formation, but to the west pebble ridges crop up, and to the east the tract shades off into the western and drier portion of the Kharora Circle of Ráwalpindi Tahsil. In this portion is much good land, but it is everywhere scoured by many streams and numerous nameless ravines, which carry the drainage of the Kála Chitta hills down to the Haro.

Tahsils Fatehjang and Pindigheb.

The central portion of the district, divided for administrative and political reasons into Tahsils Pindigheb and Fatehjang, lies between the Kála Chitta Range on the north and the Soan river on the south, and in general character is a high upland plateau, bounded on the west by the Indus and extending on the east into the Indus-Jhelum Doáb. But there are three tracts which differ in character from the rest of these two tahsils.

Fatehjang Tahsil.

First, the south-east corner of the Fatehjang Tahsil, known as the Sil Soan Circle, is cut off from the rest of the district by the abrupt wall of the Khairi Murat, which stretches along the northern boundary, and, being only passable by goat tracks, presents an insuperable barrier to internal traffic and commerce. This corner of the district is traversed by three streams, emerging from the Ráwalpindi District and flowing through the district here in a south-westerly direction. Year by year in the flood season the torrents take their toll of life. The journey to Campbellpur across them and across the Khairi Murat beyond them is always toilsome and sometimes dangerous, so that the people of this tract desire to be attached to the Ráwalpindi District, the headquarters of which are easily accessible along the lines of country hedged by the perilous streams. North of the Sil the high lands slope up in a wilderness of ravines to the Khairi Murat, scoured with torrents, and divided into fantastic shapes. Between the Sil and the Soan to the south the country is a strip of low hills and pebble ridges. The valley of the Soan itself consists of the broad and sandy bed of the stream flanked by wide stretches of rich alluvial Sil Soan.

CHAP. I, A.
Physical Aspects.
Sil Soan—concld.

loam, with thickly wooded villages clustered closely along the banks, each surrounded by clumps of rich wells. This tract is secure from famine in the worst of years. Beyond the Soan again and separated from it by high dry uplands is the Wadála, with many good wells and much good low-lying land along its banks. Neither the wells nor the alluvial lands of the Wadála can compare in fertility with the more favoured valleys of the Sil and the Soan, while the drifting sand of the stream's bed is always spreading and enveloping the fields along its banks. South of the Wadála and extending up to the Gujar Khán and Chakwál boundaries is the tract known as the Asgam. Here there are no wells. There is a narrow undulating plain of small villages, light fertile soil, and good *báráni* cultivation, closely resembling the north of the Dhanni Circle of Chakwál and the south-west of the Jatli Circle of Gujar Khan. The Asgam is really a part of the Lundi Patti *ilaqa*, part of which forms the assessment circle of the same name in the Chakwál Tahsil of Jhelum District. The name Asgam, meaning the unknown country, seems to be the Sanskrit equivalent of the name Lundi Patti, which means the patti without a tail, the country which is neither Dhanni nor Pothwár, nor Soan and yet lies near them all. This strip is most commonly spoken of as the Lundamaira, having reference to the fact that it is a *báráni* country with no irrigation and little water.

Pindigheb Tahsil.

Makhad *Iláqa.*

The second peculiar tract is the south-west corner of Pindigheb Tahsil, the Makhad *iláqa*, a wild and mountainous country. A range of hills extends along the bank of the Indus from the Soan on the south to the Reshi on the north, and in places rises as high as 2,000 feet above sea-level. Cultivation is carried on either in the sandy soil which is found on the top of stony plateaux, or in deep valleys banked up at the lower end to catch the soil washed down by the floods. Wells are few and small in area.

The Jandál

Thirdly, distinct equally from this area and from the rest of these tahsils is the remaining portion of the central plateau which abuts on the Indus, stretches from the Reshi on the south to the Kála Chitta Range on the north, and is known as the Jandál. Its eastern boundary is the high road between Attock and Kálabágh. This tract is in strong contrast to the rest of the central plateau. Here and there rock and ravine occur, but the characteristic features of the tract are the undulating stretches of fine sandy soil pre-eminently suitable for gram crops. Wheat is also grown, but *kharif* cultivation is of very little importance. There is a small amount of irrigation from wells and springs.

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Physical Aspects.

The central plateau.

The rest of these two tahsils forms a huge wedge-shaped plain running east and west, some 70 miles in length and 40 miles in breadth. This is a high upland open-air country in general barren and unprofitable, but containing here and there more fertile depressions in pleasing contrast to the barrenness of the surrounding plateaux. In the centre and towards the west the country rises to a series of broken hills covered with stones and, though cultivation improves on either side, rock always lies near the surface, and crops are liable to wither rapidly without steady rain, which is a rare event in this part of the country. To the north the soil is a hard red clay which gradually merges into the sand of the Jandál. To the east in Fatehjang the plateau approaches in character the Kharora Circle of Ráwalpindi. The soil has much in common with the dry gravelly soil of the Kharora, sandy towards the east and getting drier and harder towards the west. The transition from the rough plain of Ráwalpindi to the high upland is through dry, gritty loam. Generally this country is a bleak, dry, undulating, often stony tract, broken by ravines, and scarred by outcrops of rock. All the characteristics of aridity and bleakness common to the whole plain get more marked to the west and culminate in the hills near the Indus where the crop is poor in the best years, while in the worst years there is no crop at all.

Tahsil Tallagang.

Tallagang Tahsil is a square block of country at the very south of the district, from the rest of which it is separated by the Soan stream. The whole southern boundary of the tahsil is fringed by the northern ridges of the Salt Range, which enters the tahsil at its extreme south-west corner, where the spurs of Mount Sakesar descend into the village of Láwa. But the Salt Range hardly enters the district at all, keeping in this part of its course mostly to Sháhpur District. The tahsil is a high-lying plateau sloping gradually in a north-west direction down to the Soan, which is the northern boundary. The whole area is scoured by the deep beds of numerous torrents, descending from the Salt Range, and crossing the tract northwards, and is fretted everywhere by innumerable small ravines and gullies.

Each area between two torrents assumes a slightly arched surface falling away towards the drainage channel on either side, the best and most productive portions being those which lie under the watershed where there is a large extent of level ground not troubled with ravines. Near the large torrents the slope becomes severe, and the surface very broken and stony. It seems probable

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that the underlying rock which always crops out at the watershed is nowhere very far from the surface throughout the entire plateau, and whenever the ground ceases to be fairly level, the overlying soil, if left to itself and not banked up, is almost certain to be carried away from all the higher levels. In some instances, however, the land near these torrents is better than all the rest: this is the case when the streams leave their deep beds and run in a more open channel, when they are frequently fringed by a broad riband of level ground dotted with wells, and covered with a prosperous cultivation. Unfortunately these areas are, neither very extensive nor very numerous: they are more commonly met with on the lower courses of the torrents near their points of junction with the Soan. Outside of these low and level tracts, wells are very scarce throughout the whole of the plateau; such wells as there are being often mere holes scrapped in the light sandy soil or cut in the porous sandstone at the edge of a ravine, and yielding very little water. Each village has, therefore, several banks often raised to a great height, in open uncultivated spots, which collect the drainage water in large ponds; and on these the cattle depend entirely. They sometimes dry up, however, in bad seasons, and the distress is then very great, for in such seasons the wells often dry up also, and the villagers have to go miles for water. As a general rule the soil becomes coarser and more sandy as one proceeds from east to west through the plateau: at the same time the rainfall diminishes, the holdings becoming larger and larger, and the methods of the cultivators get rougher and more slovenly owing to the larger area that each has to deal with.

Rugged as the tahsil is, the country is nowhere broken by any prominent hills, and slopes gradually from an average height of 1,000 feet above sea level along the Soan to about 2,200 feet along the skirts of the Salt Range.

HILLY SYSTEM.

Most of the hills of the district have already been referred to in describing the general configuration and natural divisions. It is necessary now to notice them in more detail.

There is no general mountain system. No doubt geologically there is some connection between the various hills, but there is no regular chain or range system apparent in the district, and the mountainous portions are detached and isolated.

The Salt Range.

The Salt Range and the Gandgarh hills do not properly belong to the district. The former skirts the southern border

of Tallagang Tahsil. Only the lower slopes of the range are included in the district, except that at the south-west corner of the tahsil the district boundaries have been drawn out so as to include a portion of Sakesar hill. This gives the district a sanitarium 5,000 feet high.

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Gandgarh Range.

On the northern boundary of the district the Gandgarh Range descends from the Hazára hills. The range itself does not enter the district, but its western slopes project into and die away in the Chhachh tract of Attock Tahsil, while the broken country in the Nála tracts and north of the Haro river is simply the southern skirt of the range. The sudden barren hills which break up the Nála tract are probably offshoots from the main spur of the Gandgarh mountain.

Kherimár.

The chief of these is the Kherimár, or "sandal-destroying" hill, a ridge 8 miles long and less than 2 miles broad running east and west across the Nála Circle. It nowhere attains a height of more than 2,400 feet, and is both uninteresting and unimportant. Almost its whole area is a Government reserved forest, but there is not much wood or grass on it. Lundi and Kandháripur are small detached hills, satellites at its north-eastern corner.

A little to the west of the Kherimár ridge the Hasan Abdál, Budho, Bajar and Paurmiana hills, are outposts of the Gandgarh Range, each separated from the other and from the main ridge, and each simply a bare forbidding mass of rock and shingle.

Káwagar Hill.

Five miles south-west of Kherimár ridge the Káwagar hill, or Mount of Olives, has been dropped in the comparatively open plain. It runs parallel to the Kherimár, forming for about 5 miles the boundary between the Attock and Fatehjang Tahsils, and for the remaining seven miles of its course striking out west into the Sarwála *iláqa*, where it is finally stopped by the Haro river opposite Campbellpur. Everywhere its height is under 2,000 feet, and, although it starts with some suddenness from the surrounding country, its appearance is nowhere impressive. The hill is formed of black marble with a yellow vein, capable of taking a fine polish. This is worked into cups and vessels and is locally known as "abri." The greater part of this hill also is a Government Reserve, at present leased for fodder to the Camel Cadre Corps at Campbellpur, and has a number of olive trees from which it takes its name.

Attock Hills.

The Attock hills complete the lists of hills confined to Attock Tahsil. These are very bleak and bare, and are formed of slate with veins of limestone and whitish marble. The greatest height

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Physical Aspects.

Attock Hills —*concld.*

is only a little over 2,000 feet. The Attock fort and town lie at the north-western corner on the banks of the Indus. This cluster of hills also is isolated from any system within the district. It appears to have been cut off by the river from the Pesháwar hills. It is remarkable only for the fierce heat which it accumulates in the hot weather.

The Kála Chitta Range.

Of these hills the most important are the Kála Chitta Range. This wall of hills, which runs completely across the northern part of the district, and cuts off the Attock Tahsil from the other tahsils, is a rough wedge with its base resting on the Indus and gradually tapering as it proceeds eastward till it dies away on the border of the Fatehjang and Ráwalpindi Tahsils, about 15 miles north-west of Ráwalpindi Cantonment and within about 3 miles of the western extremity of the Margalla mountain range. Its breadth at its base is about 12 miles. Its length is 45 miles. The range is formed of two portions differing very much in appearance from each other, and its structure is of considerable geological interest.

The south-western portion known as the Kála Pahár or black mountain, is generally formed of very dark sandstone, often quite purple in hue, and sometimes almost blackened by exposure to wind and weather. Mixed with this are found grey sandstone and red clay.

This portion extends along the southern side from the Indus, throughout the Pindigheb Tahsil, and ends at the village of Gaggan. Its length is, therefore, 35 miles, its extreme breadth about 4 miles.

The "Chitta," or white hill, which forms the main portion of the range, runs the whole length of the range on its northern side. Its breadth at its base on the Indus is about eight miles. This portion is formed of white nummulitic limestone (hence its name), but portions of dark sandstone are occasionally to be found cropping up in the midst of it. It is much the more valuable portion of the range, both on account of the limestone, which is used for burning, and of the forest produce, which is far better than in the Kálá or black portion.

On the sandstone nothing is to be found but stunted *phalahi* trees (*Acacia modesta*) and a few useless shrubs, and the grass is poor and scanty. In the limestone portion, on the other hand, especially on the northern slopes, there is often to be found a luxurious growth of *phalahi* (*Acacia modesta*), *kahu* (olive—*olea ferruginea*), *sanatha* (*Dodonœa viscosa*), *khair* (*Acacia catechu*) and other shrubs, and much of this portion only wants a little care and management to be of very great value.

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Physical Aspects.
The Kála Chitta Rang —*contd.*

The range is in general formed of sharp ridges with deep valleys between them. The greatest height attained by the range is 3,521 feet within a few miles of the Indus, and many of the peaks range between 2,000 and 3,000. Some of the valleys are fairly broad and have a considerable area of cultivation in them, as in the case of Gandakas and Káli Dilli hamlets. Towards the eastern portion the hills are much lower and are more rolling ridges than hills, but the general surface is throughout much broken and very irregular. There are some streams to be found among these hills, and emanating from them, but none of any importance. The Nandna cuts through the range at Garhi Hassu in a very curious way from south to north, rising in the Khairi Murat and discharging into the Haro.

The climate of the tract is dry and hot, consequently only hardy plants which do not require excessive rain, and can sustain the great heat, are found here. The climate and forest produce of this tract differ much from that of hills in the Murree and Kahúta spurs of equal height. The rainfall is much lighter and the heat much greater. Many parts of this range are extremely wild and sombre, and in past times these hills formed a safe refuge for criminals, and even in comparatively recent times murder and robbery were common therein. In 1926 the gang of raiders, mostly Afgháns, which attempted unsuccessfully to commit a dacoity in Hassan Abdál, sheltered in the course of their inward journey in an enormous cave, capable of hiding 100 men, the existence of which was unknown to authority till disclosed by the member of the gang who was captured. Much of the range has been formed into a Government Reserve Forest.

There is no timber of any size produced in this tract, but the forests are of immense value for the supply of fuel to all the cantonments and cities in the neighbourhood.

The Campbellpur Railway Station on the North-Western Railway is very conveniently situated for receiving wood brought out from the north of the forest reserve, and several of the stations for the Khushálgarh branch line of that railway are suitably situated on the south of it. In the days when Makhad was the terminus of the Indus flotilla, a direct road ran from Makhad, through Thatta, and on to Attock. In 1904, except for the portion Thatta to Chhoi Gariála, it had fallen out of use, and in the succeeding decade this portion too became an impassable track. In 1926 the Hassan Abdál dacoity impressed on the authorities the necessity of maintaining this communication for the defence of the district from trans-border raids: and the District Board put

CHAP. I, A. — Physical Aspects. The Kála Chitta Range —*concld.*

the whole road from Thatta to Campbellpur into such excellent order that within a year the entire length was taken over by Government. A bridge over the Haro was commenced in 1927, and is destined completely to revolutionise the communications and to facilitate beyond measure the administration of the district, of which it will become the principal artery. Unfortunately the disastrous flood of 1929 swept the first bridge away: but the district is confident that when finances improve a new bridge will be given to it; for the remaining tracts across these hills are difficult and fit for mule and camel transport only.

Narrara hills.

South of the Kála Chitta in the south-western corner of the Pindigheb Tahsil lie the Narrara or Makhad hills. These hardly deserve the name of hills, being simply a thick cluster of high pebble ridges on the bank of the Indus. The highest point is only 1,822 feet above the sea. The general trend of the ridges is from east to west. The range on the other side of the Indus river in the Khattak country is well marked, but on this side there are only low ridges and deep ravines covered with boulders and water-worn stones. The tract is very bleak and wild, it bears little or no wood and is covered only with stunted bushes and coarse grass. In the Narrara iláqa there are some comparatively fertile valleys, but most of them are poor and inferior. The best urial shooting in the district is to be had in this vicinity.

The Khairi Murat.

The only other hills in the district are the Khairi Murat range, rich in legends of the past and stories of demons and fairies. Geographically a continuation of the Chir Phar hill in Ráwalpindi, it rises abruptly from the plain on either side and attains a height of over 3,000 feet. Beginning on the border of the Ráwalpindi District it runs steep and almost trackless, in a south-westerly direction, through the middle of the Fatehjang Tahsil, separates the central plain, or Gheb, from the Soan Valley to the south, and dies away on the Pindigheb border in a series of small spurs running down to the bank of the Soan river. The eastern extremity is about 12 miles west of Ráwalpindi, and the total length is about 24 miles. The range is formed chiefly of limestone edged with sandstone and earthy rocks, the vertical and contorted strata of which indicate extreme disturbance. The southern portion of this range is extremely dreary, formed of rocky ravines and stony hillocks gradually sinking into the fertile valley of the Soan. A considerable portion of the hill has been included in a Government Reserve, and though it had been almost completely cleared of forest growth, it has now become very valuable indeed.

DRAINAGE.

CHAP. I, A. Physical Aspects. The Indus.

The whole district is drained by the Indus, the right bank of which is its boundary and divides it from the Pesháwar and Kohát Districts of the North-West Frontier. Though all the land immediately on both banks is British, yet just opposite the Kála Chitta an ugly nose of tribal territory comes down to within three miles of the district, and it is this route that has in the past been used time and again by raiding dacoits, whose friends sheltered them beyond the river and who find the mountain ranges kindly to them on this.

The river bears two names within the district. At the point of entry from Hazára, it is known as the Attock river: and continues as such, on a widening course, separating the Chhachh from Yusafzai, with many separate channels and intervening islands, until it reaches Attock, where it suddenly contracts into a narrow rocky bed. Here joined by the Kábul river on its right bank, it becomes the Indus, and rushes on through a gorge with a high bank on each side, the Attock fort on its left bank, and under the fine railway bridge which spanned it first in 1883. Below Attock, near Bágh Niláb, it again spreads out into a kind of lake, but soon again contracts and flows thence through narrow gorges, being at one place only 60 feet wide, down to Makhad, and thence out beyond the district limits.

Navigable by native boats as far as Attock, between Makhad and Attock the passage is difficult and often dangerous, and the labour of getting boats up against the strong current is very great. The river is largely derived from snow-water, and is subject to tremendous floods. The average depth at Attock is 17 feet in winter and 50 feet in summer. There used to be a bridge-of-boats at Attock, but since the railway bridge and its sub-way have been opened, it has been done away with. A ferry continues to ply. A second railway bridge over the river at Khushálgarh was constructed in 1904.

The Indus is of no value to the district for irrigation purposes.

Watershed.

There are three well-marked drainage areas in the district which is divided by two very definite watersheds. The northern watershed follows the top of the Kála Chitta range across the district as far east as Fatehjang, then runs due south to the Khairi Murat, and finally turns north-east by the crest of that range to the Ráwalpindi border. North of this is the Haro drainage system.

The second watershed starts at the south-west corner of Pindigheb Tahsil near Makhad, runs in a straight line north-east

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across the tahsil and on to Fatehjang, thence strikes south to the Khairi Murat, and then makes off north-east by the crest of the Khairi Murat range to the eastern boundary of the district. North of this line, west of Fatehjang and south of the Kála Chitta, the country drains direct into the Indus. The chief drainage channel is the Reshi. South of this watershed all the district drainage is into the Soan. The Gandgarh hills on the north and the Salt Range on the south limit the catchment area of the district.

The northern drainage areas, which includes the whole of Attock Tahsil, the Nála Circle of Fatehjang Tahsil, and the north-eastern portion of the Gheb Circle of that tahsil, pours its waters into the Indus through two main channels, the Chel and the Haro.

The Chel.

The Chel is the only stream of the Chhachh plain, which it traverses along its southern border. It receives practically no drainage from the north but is fed by all the ravines which bring down water from the sudden ridge dividing the Chhachh from the Sarwála. The Chel rises in Musa Kudlathi and takes first of all the form of a marsh, then a series of pools and finally a small river. It presents the curious feature that it is fed largely by subsoil water which seems to filter through the mountains down to an impermeable bed from which it rises to the surface. Thus, apart from the surface spate which it carries immediately after rainfall, the Chel begins to swell only when some six weeks have elapsed after the rains.

The effect of the new drainage system has still to be seen; but it is probable that what in 1924 was several square miles of marsh will by 1934 have become rich well land.

The Haro.

The Haro rising in the Hazára hills not far west of Murree, flows past Khánpur and cuts across a small portion of the Ráwalpindi District near the village of Bhallar-top. Entering Attock Tahsil near the junction of Attock, Ráwalpindi and Hazára Districts, it flows north-west for about ten miles, then turns west and runs for about twenty miles below the main wall of the Gandgarh range, passing just north of Hasan Abdál. In the broken country east of Lawrencepur it turns south, leaves the Kherimár hill on the left and runs through the west of the Nála Circle to the west end of the Káwagar ridge. Then flowing due west it passes south of Campbellpur, and after a course of about fifteen miles through the Sarwála discharges its water into the Indus near Bágh Niláb, twelve miles below Attock. The Haro is a most capricious stream. In its course through the Attock Tahsil it violates

CHAP. I. A.

Physical Aspects.

The Haro—*contd.*

every point of the compass. In no part of its course does it flow for any distance in a constant direction. Every now and again some little hill starts up to give the stream another kink. Only in the Sarwála is its course uneventful. For much of its course it flows far below the level of the surrounding country in a channel cut deep into the rock and hard clay of the tract and flanked on either side by high precipitous banks. Add to this the sudden floods to which the river is liable, and it is easy to see what a serious obstacle the Haro presents to district communication.

The river used to be crossed by a wooden girder bridge on the Grand Trunk Road near Burhán. This became dangerous for heavy traffic during the war and has been replaced by a massive iron structure, opened by His Excellency Sir Malcolm Hailey in 1927. It resembles very closely the railway bridge which spans the river a few hundred feet higher up.

The Haro is usually fordable except when in flood, but not by wheeled traffic. In consequence up to 1928 it has created a formidable barrier between the Attock Tahsil and the rest of the district. In 1927 a bridge near Chhoi was commenced on the cart road from Attock to Makhad. This road was constructed to connect Makhad with Attock, at the time when the former town was the terminus of the Indus Valley Flotilla. The bed of the river is generally stony, and the water clear, blue and limpid. There are no tributaries of any importance on the right bank. In the eastern part of its course through the district it is crammed up against the Gandgarh Range, and to the west the only area draining into it from the north is the small dry tract sloping down from the sandy ridge between Chhachh and Sarwála including Campbellpur. From the south the only tributaries worth mention are the Chablát, the Saggar, the Nandna and the Shakardarra. The Chablát rises in the west of the Ráwalpindi Tahsil, waters the south-east corner of the Nála Circle of Attock, and passing between Hassan Abdál and the Kandháripur hill flows north till it joins the Haro after a course of about 20 miles. The Saggar gathers all the streams which flow down the northern slopes of the Kherimár, drains the fertile valleys of Hassan Abdál and Burhán to the north, and carries the accumulated waters east to the Haro.

The most important tributary is the Nandna, gathering part of the flood water of the northern slopes of the Khairi Murat. This stream flows north through the Gheb of Fatehjang and crossing the Fatehjang-Khaur road cuts through the Kála Chitta in a deep gorge where it emerges on the Nála Circle of Fatehjang. Here it is joined by the Bahudra, a considerable stream which

CHAP. I, A. — Physical Aspects. The Haro—concld.

takes its rise near Sangjáni in Ráwalpindi and flows west below the northern slopes of the Kála Chitta. Across the Fatehjang Nála the Nandna flows north-west, but on the Attock border it turns due east, and then flows in the valley between the Kála Chitta and Káwagar ridges. It joins the Haro near the bridge which carries the Mári-Attock Railway across the latter river.

The Shakardarra is purely a hill torrent. It rises in the valley between the two ridges of the Kála Chitta, flows west, and bursting through the northern ridge by the gap which carries the Mári-Attock Railway joins the Haro below.

The Reshi.

The northern and western portions of the Pindigheb Tahsil drain direct into the Indus. The smaller streams are not worth mention, but the Reshi, which rises in the west of Fatehjang under the Kála Chitta, crosses the whole of the tahsil from east to west. In its early course it is called the Tuthal, and takes the name of the Reshi only when it nears the Jandál Circle. The bed is generally deep and the banks rocky, and in but few places does the channel widen enough for a few wells to be sunk along its edges. It is of but little value to the agriculture of the tahsil, but is a serious obstacle to traffic from the north to the south. Its catchment area is small, and it has no tributaries of any length.

The Soan.

More than half the district drains into the Soan. Rising near Murree this stream, at first merely a mountain torrent, flows south-west across Ráwalpindi District and enters Fatehjang Tahsil near the village of Chauntra. Its course through the tahsil is south-west, and it receives the drainage of all the country south of the Khairi Murat Range. On leaving Fatehjang it turns east, forms for about 60 miles the boundary between the Pindigheb and Tallagang Tahsils and falls into the Indus, on the boundary of this and the Mianwali Districts just below Makhad. The Soan is a broad, rushing stream, treacherous and full of quicksands. Always dangerous, and impassable for days after rain, it exacts every year its tribute of lives. An elephant in the train of the Marquis of Dalhousie was engulfed in a quicksand when he was on the march to Kálabágh in 1850 and another also was nearly lost. The channel is broad and sandy, and on either bank are rich stretches of alluvial land, thickly wooded, studded with wells and secure from famine in the worst of years. The river is everywhere fordable when not in flood. Very few cuts or channels have been constructed for diverting water for irrigation purposes. The river is subject to very heavy floods, not only in the "*barsát*" in July and August, but also in the winter rains of January and February, and these floods prevent the construction of permanent

irrigation works. In Fatehjang Tahsil it receives two large tributaries. CHAP. I, A. Physical Aspects.

Fatehjang Sil.

The Fatehjang Sil, which rises near Ráwalpindi, receives all the drainage of the southern slopes of the Khairi Murat, and of various small streams from the north which curve round the eastern extremity. After a course of about 30 miles through the southern end of the tahsil, it joins the Soan on its northern bank at a point close to where the Pindigheb and Fatehjang Tahsil boundaries meet. In Fatehjang Tahsil the bed, previously narrow and shut in between precipitous banks, widens out, and the stream meanders along between alluvial banks until it reaches the Soan. The channel always carries some water, and heavy floods pass down after rain; but the stream is small and unimportant compared with the Soan.

The Wadála.

The Fatehjang tributary on the south bank is the Wadála, which rises near Rewat in the Ráwalpindi Tahsil and after dividing the Ráwalpindi Tahsil from Gujar Khán and the Gujar Khán Tahsil from Fatehjang, bends westwards, enters Fatehjang near its southern boundary and runs through Fatehjang for about 20 miles, a few miles south of and parallel to the Soan, which it joins on the borders of the Chakwál Tahsil of Jhelum. The Soan here receives the Karahi, Bhagneh and Sanj feeders from Jhelum District.

In its upper reaches in Ráwalpindi the Wadála is a mass of forbidding ravines, but in this district it broadens out into a wide sandy channel. It carries little water at any time, while the drifting sand of its bed is always spreading and enveloping the fields along its banks. The Sil and the Soan in their yearly scouring take much land and give back little, but the Wadála gives back nothing in return for the land over which its sandheaps drift. There are many wells along the banks, and much good low-lying land, but neither the wells nor the alluvial lands of the Wadála can compare in fertility with the more favoured valleys of the Sil and the Soan.

The Pindigheb Sil.

The only tributary of any importance which joins the Soan is the Pindigheb Sil. It must not be forgotten that the Fatehjang Sil and the Pindigheb Sil are totally distinct and separate streams and have no connection with one another. Similarly there are two Tuthal streams, one being the upper waters of the Pindigheb Sil and the other the northern part of the Reshi. The Pindigheb Sil rises in the west end of the Khairi Murat, and, receiving drainage from a multitude of small streams, enters the Pindigheb Tahsil as a rugged mountain torrent. It is here known as the Tuthal, and is not called Sil till it broadens out near Pindigheb, where for a

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—
Physical Aspects.
The Pindigheb Sil—*concld.*
Tallagang Drainage.

few miles fertile wells and avenues of trees are in pleasing contrast to the barrenness of the surrounding plateaux. The area it drains is the whole of the southern part of the Pindigheb Tahsil together with a small western portion of the Fatehjang Tahsil between the Kála Chitta and the Khairi Murat.

The Tallagang Tahsil, a high plateau, sloping from the Salt Range north-west to the Soan, is drained by a multitude of *kasis* all running north-west and all falling into the Soan. The main drainage channels are two large streams both called the Gabhir, and both rising near Jaba in the Salt Range in Shahpur District. One curves to the east and then to the north dividing Tallagang from Pind Dádan Khan and Chakwál, the other to the west and north-west forming the boundary with Mianwali District. Both fall into the Soan. The Draggar rises south of Tallagang and flows north past that town and Kot Sárang. The Ankar is a large single stream only north of Tamman. South of that town it is a great network of streams and ravines covering the centre of the tahsil and stretching back to the Salt Range. The principal stream rises in the Salt Range behind Thoa Mahram Khan. The Leti which flows in one single channel from the Salt Range to the Soan at Tráp, forms the boundary of the Miál and Pakhar *ilaqas*, and was formerly the western boundary of the tahsil. Of the streams the Leti is the deepest, and has little culturable land on its banks, which are high and rocky ; the Ankar at first also runs between high banks, but latterly widens out and has several prosperous villages on its banks. The banks of the Draggar are generally steep, but here and there expand and afford room for several flourishing little wells. These torrents are not utilised for purposes of irrigation, though a certain amount of land on the banks of a few of them benefits by their floods.

LAKES.

There are no lakes in the district. With the draining of the Chel area the marsh known in the past as the Hatti Jhil which in 1904 extended to 607·28 acres, and in 1924 to over 767 acres has disappeared.

WATER SUPPLY.

As in almost every other respect, so also as regards its water supply, the district presents no consistent picture. Most of the Attock Tahsil is well off ; but even here there is a superabundance in the Chhachh, strongly contrasting with the waterless stretch from the Kamra hill to Campbellpur. So perverse has been the Chel area that of it the proverb runs—

"Mulk wairán, Chel abád,
Abád mulk, Chel wairán."

"If the rest of the country is suffering (from drought), the Chel flourishes, if the rest of the country flourishes (from sufficient rainfall), the Chel area is swamped."

CHAP. I, A. — **Physical Aspects.** Water Supply—*concld.*

The northern portion of the Fatehjang Tahsil, and the whole valley of the Soan are well supplied with streams and wells. But elsewhere wells are decidedly uncommon, with a few rare and costly exceptions the only spots on which they are built are the stretches of level ground which sometimes fringe the course of a 'kas.'

The high arid uplands and plateaux of Pindigheb and Tallagang have very little water even at the best of times. Unless there is a natural spring the only resource is a tank or a water hole, both liable to failure. And then long journeys have to be made in search of water. It is sometimes a whole day's work to drive the cattle to water and home again.

The liquid mud that passes for water in many of the villages impairs health; and increases the discomforts of hot weather touring.

GEOLOGY.

Much information regarding the geology and geography of the district will be found in Memoirs of the Geological Survey of India, Volume XL, Part 3, "Petroleum in the Punjab and North-West Frontier" by Dr. E. Pascoe. This work also includes a bibliography of the earlier writings on the geology and mineral resources of the region.

The district for the most part is in the "Pothwár." The rocks which underlie the Pothwár are the soft gray sandstones, and orange to bright red shales of the Siwálik system. The district is a renowned collecting ground for the fossil vertebrate remains so characteristic of this rock group.

The strata dip northwards at low and variable angles from the Salt Range to the Soan river which occupies a structural trough. To the north of the Soan, the influence of the mountain building movements, connected with the upthrow of the Himálayas, becomes increasingly evident in greater complexity of rock structure, until, at about fifteen to twenty miles north of the Soan, the strata everywhere dip steeply and are frequently vertical or overturned.

This change in underground structure is not reflected in the topography, except where the hard nummulitic limestone emerges from beneath the softer sandstones and shales. The more southern of these limestone ranges is the Khairi Murat hill, an abrupt narrow ridge rising to over 3,100 feet, some 1,400 feet above

CHAP. I, A. — Physical Aspects. Geology *concld.*

plateau level. This ridge forms a conspicuous feature in the landscape for many miles in every direction.

Further north, between Fatehjang and Campbellpur there are several similar limestone ridges which together form the Kála Chitta hills, a favourite hunting ground for 'uriál.'

The high ground in the extreme north of the district, near Attock and north of Lawrencepur is formed by a much older rock series—known as the Attock Slates. In the absence of fossil remains, these rocks are believed to be of great geological antiquity and may belong to the Precambrian system.

The general trend of these hill ranges is from east to west, parallel with the general trend of the Himálayan ranges further north of which they form the foothills and outer ramparts.

BOTANY.

The flora of the district is unimportant. The only forest at all worthy of the name in the district is that on the Kála Chitta Range. There are various preserved areas, however, elsewhere in the district, as on the Kherimár, Káwagar, Khairi Murat Hills and in the Narrara tract. All the large landowners make their own rakhs, in which they carefully preserve the grass and wood, and allow no one to trespass. But in general the district is very bare. The vegetation is poor and sparse and the country is thinly wooded.

Trees.

Everywhere the most common tree is the *phuláhi* (*Acacia modesta*). A few specimens are large trees with heavy timber, but in general it is stunted, with gnarled and contorted trunk. It is perhaps the most important tree in the district, because it is the only one which is really plentiful. Goats and sheep feed on it. The wood is dark, strong, heavy and close-grained. Oil mills are made from the largest specimens, and ploughs, well-work, and all manner of agricultural and domestic implements from the smaller wood. For these purposes it excels all the other timber trees of the tract. As it is a tree of very slow growth, its wood is very durable, but if it is not cut down on full maturity the timber soon decays and becomes useless.

The more graceful *kíkar* (*Acacia Arabica*) is found along roads and among the cultivated fields. In the Soan valley there are some fine groves of *kíkars* planted and carefully preserved. Near and in the hills it does not seem to succeed, being probably killed down by the severity of the winter frosts, by which this tree is readily affected in the first years of its growth. Where it grows at all, it grows very rapidly. It is perhaps the most useful of the district trees. The timber is hard and durable,

CHAP. I. A. Physical Aspects. Trees—concld.

considering its quick growth, good for ploughs and well wheels, for cart making and a variety of other purposes, while it is also useful for burning. The bark and the pods are valuable tanning agents, the latter also affording excellent food for sheep and goats, and the leaves, too, are freely eaten by all stock in times of drought. The gum that exudes from the tree is an astringent medicine.

The *shísham* is fairly common in the richer parts of Attock Tahsil. South of the Kála Chitta it is comparatively rare, but is found, especially in the east, clinging to the banks of ravines and torrent beds.

The *khair* (*Acacia çatechu*) grows in the Kála Chitta and Khairi Murat Ranges. But next to the *phulahi* the commonest hill wood is the *kao* (*Olea europala*) or wild olive. In the plains it is found only in the Nála Circle, and is always a mark of good soil and generally of limestone soil. It flourishes on the Kála Chitta, the Khairi Murat and the Káwagar hill, and only there attains to considerable size. Goats and sheep browse upon the leaves, which are useful for cattle also in times of scarcity. Standards outside reserved forests are kept small by constant browsing. The fruit is neither eaten nor crushed for oil. The wood is very hard and good, though small. Sticks, combs, charms and rosaries are made from it.

The *ber* (*Zizyphus jujuba*) is not uncommon. The leaves and young shoots are useful as fodder, and the wood for house-building and fuel. The fruit is a not unimportant article of diet. A small variety, called "*beri*" or "*malla*" (*Zizyphus nummularia*), grows freely as a shrub in Tallagang, where it is cut over every year, the dried leaves mixed with chopped straw being considered a valuable fodder for cattle particularly milch kine. The branches are used for making hedges. The fruit too, though small, is eaten.

Dhrek (*Melia sempervirens*) nowhere grows wild. It is planted near wells and houses, especially new wells and houses, as it grows rapidly and is useful as a shade tree. But it is not very plentiful. The wood is of very poor quality, but is used for light rafters and the like : also for plough-yokes (*panjáli*).

Bohr or banyan trees (*Ficus indica*) and less often the "pippal" (*Ficus religiosa*) are occasionally seen.

The *tut* or mulberry is found among roadside trees and in Attock Tahsil ; seldom elsewhere.

Brushwood.

Generally vegetation is better towards the east. Towards the west it gets thinner and scantier. The leafless "*karil*"

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Physical Aspects.

Brushwood concld.

(*Capparis aphylla*) becomes common and always marks bad soil. It grows on rough lumpy ground, and though seldom more than a large bush, it sometimes becomes a tree of small size. The ripe fruit (*pinju*) is eaten, and the half ripe is pickled (*déla*). The wood is used for fuel and for light lath-work in village houses. The *jal* (*Salvadora oleoides*), with its *pilú* fruit, is found near the Indus. It is sometimes a tree but more commonly spreads into a bushy undergrowth. *Lána* also grows near the Indus and on *kallar* lands, too salty to produce anything else. It is always a sign of aridity and desolation. It affords excellent grazing for camels, and cattle will eat it if very hard put to it for food. It is not to any extent burnt for "*sajji*" or carbonate of soda as is commonly done in the adjoining district of Sháhpur.

By far the commonest of the hill shrubs are "*bhekar*" (*Adhatoda vasica*), and *sannatha* (*Dodonæa burmaniana*). *Bhekar* grows everywhere. The flowers are white, with rather an evil smell, but are much beloved of bees. The shrub is useless except as fuel for native limekilns and to a small extent for making charcoal. *Sannatha*, a quick-growing shrub, often reaching ten feet in height, but degenerating after ten years, often covers the entire slope of a hill. It is a pleasant looking shrub with glistening dark green leaves. It is very inflammable, even when green. Except for fuel and light roof-work it is useless.

The *ghanira*, or oleander (*Nerium odorum*), with its pretty pink and white flowers, is common in many of the torrent beds. Its leaves are poisonous, and animals bred in the district always avoid it. Imported stock seem to have no such instincts. The stalks are used for pipe-stems and ox-goads.

The straggling *ák* with its broad leaves and woody stems is a familiar object on poor land. It is generally considered a useless weed, but it can be made to serve various useful purposes. The stalks are burnt, goats browse on the bitter leaves, fibre can be got from it, and the cotton-like down in the pods is considered a luxurious stuffing for cushions.

Weeds.

The thorny "*pohli*" not unlike a thistle, but with a yellow flower, covers acres of the district after the *rabi* harvest. The seeds are edible and are often eaten in years of scarcity. The most intrusive of all weeds, however, is the "*bukat*" or "*piyázi*," an onion-like weed, which occurs all over the district, and may often be seen filling entire patches in wheat fields, having choked the growing corn. Its black seeds are sometimes ground and eaten by the very poor in times of great scarcity. "*Bhakhra*" is another common weed, which produces in the autumn an abund-

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Physical Aspects; Weeds—concld.

ance of triangular spiked seed-pods. In times of drought these are ground and mixed with flour to make a black and sour substitute for ordinary wheat cakes. The "*harmal*" (*Pegarum harmal*) is also common ; it is useless, but does no harm.

Grasses.

A very useful weed (if it can be so styled) is the *chanaka* (*Diptotaxis griffethsii*), a sort of wild oilseed rather like *tárámira* but with a violet flower. It grows freely in Tallagang in favourable years, and the seed is collected and sold for export to Amritsar at 9 to 12 seers per rupee. It is there known as "*khúb kalán*," and is used as a drug in fever and debility.

The grasses of the district are of importance, as in many places there is very little fodder to be had for the cattle (apart from fodder crops specially grown). Unfortunately grasses are poor and scanty, especially in Pindigheb, and good supplies are to be obtained only in areas especially retained for grass production. *Dúb* grass is not much found. *Khabal* (*Cynodon dactylon*), the best of all for horses and cattle, is hardly found at all. This is a good, short, green grass, growing chiefly on the boundaries of fields of good soil, and to be had at all times of the year when rain has fallen. *Sawánk* (*Panicum colonum*) is a longer grass, growing best in places where water has been lying. It is cultivated to a small extent as a cereal, and grows up freely in the crops of the autumn harvest. It dries up after the rains have fully ceased. Up to the time of ripening it is a very good grass, but after that it is of little good as it completely dries up. The coarse *dabh* is much the most common. It grows in poor land, but is more harmful than useful. It is of a bright green colour and is eaten by cattle only when nothing else can be got. "*Baran*" is another long grass ripening in the *kharif* harvest, sowing itself. It is said to be injurious to cattle when unripe, but fairly useful afterwards. Hill grasses, *chitta* and *phalwár*, are the most common fodder grasses.

The most valuable grass of all is perhaps the "*sarút*" (*Saccharum munja*) which occurs chiefly in loose sandy soil near the beds of torrents, and is generally self-sown, but sometimes planted as a boundary, or as a protection from drifting sand. It is especially common in the Sil Soan, where some profit is derived from its sale, enough at least to make it worth while in places to leave untilled the land on which it is found. It grows in large stools, often 12 feet high, the lower part being formed of thick reeds called *kána*, out of which springs the *tílli* or thin part of the stalk, which carries the large feathery white flower and the whole is wrapped round by the leaf called "*munj*." *Kána* is used instead of rafters when wood is scarce, and from it are made the

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heavy baskets from which the cattle get their feed, as well as chairs, stools and the like. The "*tilli*" is useful for all light basket work, while the *munj* is the common material for village rope-making.

FAUNA.

Leopard.

The largest wild animal found in the district is the leopard, which is occasionally met with in the Kála Chitta and on Sakesar hill. They are usually shot by means of sitting up over a kill or over a goat tied up in the jungle at night. They prey chiefly on the mountain sheep or "*uriál*," but at times do damage to sheep and goats, and sometimes attack horned cattle also.

Hyæna. Jackal.

The Indian *hyæna* also occurs in the hills, but is not common. The jackal is occasionally seen and constantly heard in all parts of the tract.

Fox.

There are rare but authentic cases of the fox having been seen in the neighbourhood of Campbellpur.

Uriál.

The *uriál* or *huriár* ("oorial") (*Ovis vignei cycloceros*) affords the best large game shooting of the district. *Uriál* are found in the Kála Chitta Range and outlying spurs, in the Narrara hills, and the Salt Range and in a good deal of the ravine country at its base. Even at some distance from the hills they are found, as, for instance, in the north-east corner of the Tallagang Tahsil and among the ravines and low hills throughout the south-west of the Pindigheb Tahsil. Shooting is preserved; and is only permitted on license. The number of head to be shot in any one year is decided by the Forest Officer and the Deputy Commissioner in consultation. The district has been divided into blocks, and the number of head permitted to be shot usually varies from 24 to 32. Heads less than 23 inches are prohibited. Anything from 27 to 30 inches is good. The *uriál* has the reputation of being difficult to approach, but the difficulty seems to have been a good deal exaggerated. The males and females separate during the rainy months, *Sáwan*, *Bhádon* and *Assúj* (mid-July to mid-October); the pairing season then follows and lasts about five weeks. The young are dropped about the end of April, there being generally two. A male of one or two years is called *khira*, *chapra*, or (at two years) *dunda*: there is no special word for a three-year old; one of four years is *chauga*, and one of six *chhigga*, anything above that being a "full male." The *chapra* has horns up to about 10 inches, the *chauga* up to about 21; in the *chhigga*, the beard becomes prominent, black at first, but hoary white in very old age. The age can be told from the teeth.

Chinkara.

The *chinkara* or ravine deer (the Indian gazelle, *Gazella beretti*), generally called *hiran*, occurs in the *maira* of Tahsil

Chinkara—*concld.*

Attock, in the south of Pindigheb, and in the ravines in some parts of the Pindigheb plateau, but is not common. They are said to breed twice a year in April-May and October-November. Bucks and does are almost always seen together, and the former seem if anything the more numerous, a point in which they differ from the *uriál*. Their horns are usually about 10 to 11 inches in length, but there are a fair number with heads an inch or two longer. There are no black buck in the district. Hares are to be found on all the low hill spurs, but are not often plentiful.

Birds.

The blue rock pigeon is common, especially in the Salt Range and the Kála Chitta. The Indian stock-pigeon also visits the district in the cold season, and has been shot in July and September. It would seem, therefore, that it does not migrate. Of partridges the *chikor* (*kaunk*) is found in the Kála Chitta, the Salt Range and the Narrara hills, but is not plentiful. The seessee (*susse* or *chinkala*) is plentiful in the lower and more barren foothills and ravines all over the district. The grey partridge (*tittar*) is fairly common everywhere, but the black partridge is found very rarely, if at all. The large sandgrouse, *bhatittar* (*P. arenarius*) is not uncommon in Tallagang Tahsil. The small sandgrouse (*P. exustus*) is also fairly common in the stubbles of *bajra* and *moth*.

Quail in large numbers visit the district in spring and autumn. Snipe are rare. They are shot in small numbers in a *jhil* on the Soan near Sháh Muhammad Wáli in the extreme north-west corner of Tallagang.

The ordinary bustard or *ubara*, here called *kharmohr*, is occasionally found near Attock fort and also in Tallagang and Pindigheb, especially in the west of the former tahsil, the *taramira* fields in the morning and evening being the best place to look for it. The demoiselle crane or *kulang*, here called *kúnj*, is common in the cool months, in the neighbourhood of the Soan, where the natives make a practice of catching them on the wing with a simple kind of lasso made of a long piece of cord with a stone at the end of it. The grey goose (*magg*) is sometimes met with on the Soan. Duck are also found in the season practically wherever there is water. Mallard, teal, pochard, gadwall and the ubiquitous shoveller are amongst the varieties which visit the district.

Although there is thus a large variety to choose from, sport in the district is not good, but game would probably be more plentiful if there were not such a large number of guns always ready to shoot it wherever it is to be found, and if netting and snaring were not such prevalent practices with the natives of the district.

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Physical Aspects.
Birds—concld.

Hawking is a very favourite sport with most of the natives of the upper class throughout the district. In the Pindigheb Tahsil the *ubara* and hares and duck are the favourite quarry, and in the low hills partridges and *chikor*. Throughout the district, however, hawks are flown at almost any game, and many of the species are great poachers. The snaring of birds is also carried on to great extent, and many of the natives shoot game.

Reptiles.

Snakes are not so common as in many other districts, but abound in the hills. The commonest kinds are the cobra and karait (*Naja tripudians* and *Bungarus cœruleus*). A brown viper is not uncommon in the lower hills. There are also some non-venomous snakes resembling the Dhámun. Lizards of different kinds are common, including the familiar house lizard or gecko, tree lizards, and several varieties living in holes in the ground, of which the large *goh* is the most important.

Fish.

The commonest fish in the rivers of the district are the *mahseer* and *rohu* and the best streams are the Haro with its tributary the Chablát, and the Soan. There are of course *mahseer* in the Indus, but the best fishing is in the Haro. The fishing has been very much damaged within recent years by dynamiting the pools and by indiscriminate netting, and the number of fish is not nearly so large as it used to be. In 1906 the Northern India Fishing Association was revived and portions of the Haro, Chablát and Soan were strictly preserved. But the revival did not endure, and netting and dynamiting again became common. In 1927 a stricter reinforcement of the Northern India Fisheries Act, passed in 1914, was attempted, and a fisheries chaprassi is posted at Hassan Abdál. The effect has been to increase the revenue from licenses, but convictions of poachers are difficult to obtain.

Fish are of comparatively small importance to the people as an article of diet. The most delicate eating is the ' palwa ', a kind of fresh water sprat, netted in the Indus usually in March.

Insects.

Swarms of locusts (*Makri, Acridium Peregrinum*) often make their appearance in the southern portion of the district, occasionally doing very great damage to trees and crops.

Serious visitations are recorded in 1843 and 1844 when the damage was so vast as almost to cause a depopulation of the country. In 1891, the young wheat crop was almost entirely destroyed in Tallagang and Pindigheb. In 1927 the Attock Tahsil was heavily attacked : and the tobacco crop saved with difficulty. In 1928, Tallagang suffered. In 1929 the rabi crop throughout the district suffered severely. Other invasions are remembered,

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but these were at a season when they could not do very much damage. In the long run perhaps more harm is done by the *toka*, a kind of cricket which is always present in the summer in great or small numbers, and sometimes does much damage to the autumn crops. White-ants also injure the young crops in seasons of drought, besides doing damage to other property. A beneficial insect is the honey bee which is common enough on the Salt Range: and the wild honey is much appreciated.

TEMPERATURE AND CLIMATE.

The extremes of heat and cold are very severe. The high upland plateau which forms the whole of the district south of the Kála Chitta Range is baked under a hot sun in the summer, and in winter a bitter north wind prevails, the cold being often intense. In the Attock Tahsil the summer is short, and the cold weather long and severe. The climate is more variable than that of the ordinary Western Punjab districts; being affected by the storms which in the spring are apt to pass from Persia into Baluchistan. Thus though one anticipates the end of the cold weather to come in April and the thermometer to rise thenceforward till the monsoon breaks in July, storms, or their aftermath, not infrequently keep the district cooler through the end of April and the beginning of May than it was during the preceding month. In the second half of May it begins to stoke up again. It is optimistic to expert the monsoon before the third week in July.

Even in the worst months it is unusual to have a succession of really bad nights.

With the coming of rains the temperature falls considerably, though the damp heat which follows any cessation of the monsoon for more than a week or ten days is often severe. In the western portions of the district, among the rocks of Attock, the sandy slopes of Jandál, and the low hills of Narrara and Makhad, the summer heat is of the most intense description, and is found almost unbearable even by the natives of the tract. The wells and tanks dry up, hot winds blow, and the glare of the sun is terrific, reflected as it is by white sand and almost red hot rocks. The breaks in the rains are much longer, and even in August sometimes the country appears quite dry and resembles a furnace. The inhabitants are nevertheless a fine robust race. The rains generally come to an end about the beginning of September. Towards the end of that month the nights begin to be sensibly cooler, and the beginning of the "cold weather" soon follows about the middle of October, though the heat in the sun remains considerable for some weeks longer. The end of September and the beginning of October after the cessation of the rains are

CHAP. I, A.

Physical Aspects.

Temperature and climate —*concld.*

sometimes feverish. The latter half of October and November are generally the most delightful part of the year. There is little rain, and the air is cool with bright sunshine. Through the winter months the district enjoys almost perfect weather with bright days and cold clear nights with generally some frost in the two coldest months, interrupted at more or less frequent intervals by spells of cold, raw, rainy weather due to the winter rains, which usually begin soon after Christmas, and end with February, though earlier and later storms are not uncommon. Towards the end of March the sun again becomes powerful. East winds, which are very trying, are often prevalent in the cold weather. The months from April to August are notably the healthiest. Pneumonia and bronchitis, at other seasons prevalent, are then less rife, and fever also is less severe. The district on the whole is very healthy.

RAINFALL.

The recording stations besides the tahsil headquarters are Hassan Abdál, Tamman and Láwa Tamman and Láwa were opened in the year 1927. Their first reports were received in April 1927.

Statistics of rainfall are given in Tables 3, 4, 5 of the statistical volume of the *Gazetteer*. The rain-gauge station at Tallagang is situate at the extreme west of the tahsil and the rainfall recorded at it is heavier than that of the tract which it represents. Probably in Attock Tahsil there is more rain in the outlying parts than in Attock itself, but appearances are deceitful, and Attock, in the hot weather, even after a thorough soaking, never obtrudes the fact. Of Pindigheb, on the other hand, it may be said that nowhere in the tahsil is the rainfall greater than at Pindigheb itself. General rain over the whole tahsil is uncommon, one village or one tract getting a soaking while the adjoining country gets little or nothing. The Makhad hills are often left without any rain at all when the rest of the tahsil is doing well. The further the tract lies westwards from the Himáláyas the less rain, as a rule, it gets. The rainfall of the whole district is much less than in the adjoining tahsils, Ráwalpindi and Gujar Khan of Ráwalpindi District. But the broken nature of the country and the many ridges and hills which start up cause local exceptions to this rule. Láwa, for instance, in the extreme south-west under Sakesar gets as much rain as any part of the southern tract, while many villages under the Kála Chitta do not seem to profit by their situation. Overshadowing hills seem in some parts to attract rain, in others to repel it. The rainfall seems also to follow the river valleys in a curious manner.

The valleys on the Soan banks get much more rain than those a few miles distant from it. CHAP. I, A Physical Aspects Rainfall—*contd.*

For the district as a whole the rainfall is somewhat scanty and very uncertain, varying greatly from year to year. The average rainfall for the last twenty years was 21.3 inches. The average for each tahsil for the 20 years, 1903—23, was—

	Inches.
Attock	21·88
Fatehjang	27·1
Pindigheb	19·8
Tallagang	21·26

but there is a difference estimated at three inches between the average rainfall of Tallagang East, which is the higher, as compared with Tallagang West. The rainfall at Fatehjang is much greater than that of the rest of the district, but is far less than at Ráwalpindi and Gujar Khan. It averages about 27 inches per annum. The average yearly rainfall at Attock is about 22 inches. What is almost as much of importance as the amount of the rain is its distribution in time. A small rainfall well distributed is infinitely superior to a heavy fall crowded into a few abnormal storms, with long intervals of aridity both before and afterwards. What is required is a heavy fall in the first or second week in July, followed by occasional and regular showers, and finally a big downpour in the middle of September, so as to ensure the germination of the wheat crop and the ripening of the *kharif*. It is this September rain which is all important, as on it depends the spring crop, which makes or mars the prosperity of the district. Provided the wheat crop is secured, it does not much matter, except in parts of Pindigheb and Fatehjang, and there to a less degree, what happens to the *kharif*. For ripening the wheat heavy rain is required in January and subsequent showers all go to help. In Attock Tahsil as a rule the cold weather rains are very regular. The moist soil of the Chhachh and the light sand of the Sarwála Circle keep their vigour a great deal longer than the thirstier but stronger lands of the Nála Circle. Thus in 1903, when the winter rains did not come till early in March, the Chhachh and Sarwála Circles had bumper crops, but the failed area in the Nála Circle ran as high as 43 per cent.

The climatic conditions of the spring of 1928 will long be remembered. There were late and heavy rains throughout March; and the storm that visited the whole Punjab made itself felt throughout the district. But it was not till the reaping began that the extent of the damage was apparent. Ears that looked rich were found to be empty, stalk that was tall, was black and

CHAP. I, A. — Physical Aspects. Rainfall— concld.

inedible. The grain was shrivelled ; and when ground gave a flour the bread of which was almost uneatable. The villages which suffered most were those to the north of Hassan Abdál ; and the soils which suffered most were the rich irrigated lowlands. Thus it fell out that the damage was worst in Attock, next in Fatehjang, less severe in Pindigheb, and occasional only in Tallagang. So heavy was the damage in the two northern tahsils that arrangements were made by Government and the Sirdár of Kot for the import of approximately 1,000 tons of seed from less unfortunate districts. This new variety has given a better yield than the local grain, and its cultivation is being extended.

The rainfall in Fatehjang is generally sufficient to mature *báráni* crops, but is often ill-distributed. Heavy rain in July and August will be followed by a break in September, or a failure of the early monsoon is followed by a burst in September too late to save the crop, or good autumn rains are followed by bad winter rains. The best year of all was 1910-11, when the total rainfall was nearly 57 inches. The September rain is the most precarious of all. It may be said with confidence that if the average rainfall with the average distribution fell every year there would be no cause for anxiety about the "*báráni*" crops of Fatehjang. In Pindigheb also the September rains are everywhere precarious, and it is common for the *rabi* crop to be left unsown for want of moisture. The winter rains are generally late, and in a bleak hot country like this where the *kharif* is nothing and the *rabi* everything, it is the September rains and the early winter rains which determine the character of the year.

In Tallagang too the critical month is September, and the *rabi* crop is all important. The autumn rains which provide the moisture necessary for sowing appear to be much more uncertain than the Christmas rains. Locally the following names are sometimes used for the various seasons. The hot season is called "*Unhala*"; the rains, as elsewhere, "*Barsát*"; the spring "*Khuli Bahár*", and the autumn and winter "*Thandi Bahár*".

EARTHQUAKES AND FLOODS.

No distinctive cyclones or earthquakes are on record. Earthquakes do occur, very rarely, but, though perceptible enough, they are too slight to do any appreciable damage.

Floods are of frequent occurrence and occasionally have done great damage.

I am indebted to the issue of the *Civil and Military Gazette*, dated 31st August 1929, for the following contemporary account of the flood of 1841.

" Peshâwar, 12th June, 1841.

You will probably have heard a report that was prevalent here about six months ago of the course of the Indus in the mountains above Attock having been interrupted by the falling into its bed of an enormous mass of mountain. Little credit was attached to this report at the time, although everyone accustomed to view the Indus admitted that the volume of water it discharged had become sensibly less, and was diminishing daily.

" Within the last few days, we have had a fearful corroboration of the course of the river having been interrupted in the devastation it has caused, then again, with sudden violence, opening a road for itself. All the country from Chhachh up to near Pubbi, within ten miles of Peshâwar itself, has been overflowed. Some twenty villages as far as we yet know, together with the towns of Hardree, Khyrâbâd, Akora, and Naushera, have been completely swept away by the deluge, and the loss in human life has been frightful. All who stopped to attempt to save their property and in some cases, their families, fell sacrifice.

" The boats of the bridge at Attock were forced up the course of the Landâi (Kâbul) river as far as Naushera. Two of our *harkáras* (postmen) were swept away on this side of Attock, and we have no *dáks.* Shah Pasand Khan and his family, who were going to Lahore, and were encamped on the banks of the Landâi river, lost their elephants, horses, two boxes of treasure, and everything in their camp but their own lives, which they only saved by capturing a boat in time. "

" 16th June, 1841. By a letter received from Hardree in Chhachh I learn that the four battalions of mutineers, who were at Saidoo, and who lately proceeded to the right bank of the Indus, have been swept away almost to a man by the late inundation of the Indus. Sirdar Sham Singh and Mian Arbil Singh, who had joined this force, happened to be out in pursuit of Painda Khan with a few men, and thus escaped, but a great number of horses belonging to them, and their camp, which with that of the four battalions, was encamped close to the right bank of the river near Amb (*sic*) are reported to have been swept away.

" The Ahlúwâlia force in the Yusufzai territory are said to have escaped with the loss of thirty horses and a few men. Accounts have reached us *viâ* Kohât and from as far as the Isa Khel territory below Kâlabâgh, to which extents the effects of the inundation have been felt, that many villages with their

CHAP. I, A. — Physical Aspects. Floods—contd.

inhabitants have been swept away. Further particulars will reach you if I receive them."

The story of this flood has passed into the ballads of the countryside ; and the following is a translation of the Pashtu original :—

Men, behold ye as the doings of God !

The Indus nearly dried up in 3 days,

The boats, rafts and other flotillas ceased.

The young and old could cross the Indus equally.

This lasted for six months.

All fears were removed from the people's mind.

All of a sudden a communication arrived from the up country saying that the Indus was blocked in the up hills :

You must believe this communication, and residents within 12 miles from the banks are in danger.

One day in the afternoon the flood broke : that day was like the resurrection day.

Residents of Khabal and Sithána were drowned. No one was left alive in Barái, 1-4th Tarbela area was washed away. No life was saved in the islands. Bajwára, land of roses, was submerged under the Indus water.

Some villages of Chhachh were destroyed. Yasin and Asghar were totally demolished.

The Kábul river was pushed back.

When the flood hit against the Attock hills, four thousand souls perished. In Nowshera the flood passed up the Dheri ferry at sunset.

The waves of flood reached Charsada : and the tide turned back next morning.

The gold washers balanced their accounts with the Indus. Some got their dues and some are owed yet.

Some starved for a year : some refused to eat the best dishes.

Some families were drowned : and some families are still homeless.

I cannot give further details of the havoc. God knows what mischief it brought everywhere.

I, Wahâb, am a resident of Dhamtor but live in these days in Gandh-Garh.

Though such a calamity is rare, floods rendering it extremely dangerous to cross the river are very frequent and serious loss of life is not uncommon.

In 1889 a marriage party of 78 persons, including some bandsmen of the Guides, were crossing the Indus at Attock, when a storm and flood overtook them and sunk the boat.

In 1928 news that a disaster that might be comparable to that of 1841 reached the district. The Shyok glacier had dammed the course of the Indus, and millions of cubic feet of water would be released when the ice barrier should burst. It was estimated that the flood would cause a rise of from 25 to 30 feet in the river: and if that rise were to coincide with a period of heavy rainfall the consequences would be serious. Elaborate arrangements were made by the Punjab Government for conveying the earliest possible news to the district: and by the district authorities both for warning and helping to safety the people in the affected tract. There was one false alarm in 1928, which, however, served as a dress rehearsal: and the following year, when the flood did come, not a single human life was lost. The Shyok glacier caused a rise of some 29 feet, as anticipated: but fortunately came when the river was comparatively low. Had it come a few days later, when a second flood due to a cloud-burst in Kashmir swept down the river, the results would have been disastrous. As it was, the flood water carried away considerable numbers of cattle: though many, thanks to the precautions taken, were saved. The villages of Mulla Mansur and Mansar were washed away: and many houses on the low-lying banks fell in. For four to five days the dwellers of the low-lands sought refuge at Haji Shah or other higher ground: and it was a month before there was comfort in the homes again.

Section B.—History.

EARLY HISTORY.

In the first edition of this work, it was remarked "The history of the district up to the time of Alexander is of interest only to the antiquarian."

How great that interest is likely to prove in the near future has been indicated by a find of relics of man of the stone age, discovered by Lieutenant Todd, R.I.M., of H. M. S. 'Dalhousie', when visiting Pindigheb on recruiting tours in 1929 and 1930. I am indebted to him for the following note:—

"*The Pindigheb Find.*

There is a small jhil about 2 miles south of Pindigheb and ¾ mile west of the road to Dhok Pathán. It is situated in a fold of a plateau of sandstone, and on the slopes round it are to be found stone implements made of Quartzite and Trap. These tools consist of knives, blades, scrapers (both end and side), a nearly completed axe, and a discoidal tool. This latter was

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probably used in conjunction with a sling. These implements are, for the most part, in good condition and show very little signs of weathering. In technique they are similar to those of the Middle Le Moustier (so called, as this type was first found, in three stages, at a place called Le Moustier in France) of Europe, which are about 40,000 years old. No artifacts of this type have yet been recorded in India, and it has been said that no stone tools, other than Neolithic ones, are to be found in the Punjab. These tools are Paleolithic, and are the first ones recorded from the Punjab.

Description of some of the Specimens.

1. *Flake knife.*—Coloured a light brown, with the exception of the places where it has been flaked, and there it is a reddish grey. This implement has been formed by the removal of a flake on the left hand side, and has had subsidiary trimming all round the edges. The bulb of percussion on the reverse side is well defined.

2. *Disc.*—Brownish grey in colour, flaked all round and made of quartzite. Similar to those found in Madras Presidency.

3. *End and side scraper.*—Coloured brown and made of quartzite. It has been flaked all round the edges, forming an elongated Sledge.

4. *Incompleted hand axe.*—Yellowish white in colour, 3 by 1¼ inches and made of quartzite. It has been flaked over the whole of one side, and has had the edges trimmed on the other.

5. *Flaked scraper.*—Oblong in shape and about 2 by 1 inches. Made of quartzite and has had three main flakes removed from the upper surface. Subsidiary trimming round the edges. Coloured greyish white, and has cortex (skin) on the nose."

Leaving behind us the fascinating speculations to which this find must give rise, we seek the earliest traces of the history of the district in the theories of General Cunningham. This authority holds that the Takkas were the earliest inhabitants of this part of the country after the Aryas, who are supposed to have come into it about the middle of the second millennium B.C. The tract between the Indus and Jhelum, known as Samma, is supposed to have been held by Anavas of the Timur race, Peshâwar and the country west of the Indus by the Gandhârâs.

The Takkas, themselves, are believed to have held the whole or the greater part of the Sind-Ságar Doáb. From this tribe General Cunningham derives the name of Taxila, or Takshasilá, which, at the time of Alexander, was a large and wealthy city, the most populous between the Indus and Hydaspes (Jhelum), which is identified beyond a doubt with the ruins of Sháhdheri or Dheri-Sháhán, a few miles to the north of the Margalla pass in the district of Ráwalpindi. So far, General Cunningham's theory as to the early population of the district seems reasonable enough, though it rests on little more than surmise; but he goes on to assert his belief that already, before the time of Alexander, the Takkas had been ousted from the neighbourhood of Taxila by the Awáns. This theory he builds on the scanty foundation existing in the similarity of the name Awan or "Anuwan," as he would read it, with that of Amanda, the district in which, according to Pliny, the town of Taxila was situated. The traditions of the Awáns are so strikingly opposed to this theory, as to deprive it of much, if not all, of the weight with which the authority of General Cunningham might otherwise invest it.

In the first edition of this work reference was made to the theory that the Takkas or Takshah Scythians overran the northern portion of India somewhere about 600 B.C. but the modern historians have been unable to find any evidence either of Scythians having entered India as early as 600 B. C. or that the Takkas were Scythians, or even that Buddhism, as was earlier alleged, existed at Taxila in Alexander's time. CHAP. I, B. History.

About 500 B.C. Darius conquered Western India. In 327 B. C. came Alexander's invasion. At this time Abisares ruled over part of modern Kashmír, and Porus ruled over the country east of the Jhelum river. Taxiles ruled the tract lying between the Indus and the Jhelum.

The classical texts dealing with Alexander's Indian campaign unfortunately furnish no direct indication whatever as to the place where he crossed the Indus, beyond the obvious fact that it lay lower down the river than Aornos. That it was situated on the route from the open plain of the Pesháwar valley towards Taxila is clear. Of this route we know from the account of the Chinese pilgrim Hiuen Tsang that it led in the seventh century A. D. through *Und*, an important site on the right bank of the Indus opposite the Chhachh plain. Und, the ancient *Udabhándapura* was, for centuries before the Muhammadan conquest, the winter capital of the kingdom comprising both Kábul and the Pesháwar valley, and was designated by the early Muslim invaders of India the " Gate of India " (*Duár-i-Hind*).

In view of this, there is good reason to believe that General Cunningham was right in suggesting Und as the most likely place of Alexander's crossing.

It follows that Alexander must have crossed the Attock District. The site would probably have been some fourteen miles upstream of the Attock bridge opposite Und, and there are on the left bank indications of buried sites, whence coins of the post-Alexandrine period have been recovered, that may perhaps interest the archæologist hereafter and provide further knowledge.

It was General Cunningham who first identified Sháh-Dherí on the edge of the Attock District, but actually within Ráwalpindi, with Taxila. Extensive excavations carried out on these ruins by Sir John Marshall from 1912-13 onwards have confirmed the General's identification. The northern portion of the Attock District, now locally known as Chhachh (ancient Chuksha), in ancient times formed part of the kingdom of Taxila, and as the remains of this Taxila Excavations.

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History.

Taxila Excavations —*contd.*

great city are likely to be found to extend into the present boundaries of the Attock District, a concise *resumé* of the results achieved at Taxila will not be without interest at this place. The remains of Taxila, long famous in ancient Indian texts as a seat of learning, extend to the east and north-east of the former Sarái Kálá railway station, now changed to Taxila Junction, and lie in a pleasant valley, protected by a girdle of hills and irrigated in its northern half by the Haro river and its tributaries and in its southern by the Tabrá or Tamrá Nálá, another tributary of the Haro river. The remains of three distinct cities have been recognized within this valley and within three-and-a-half miles of each other.

The most ancient of these three city sites is that now locally known as the Bhir Mound, situated between the Taxila to Havelián Railway Line and the Tamrá Nálá, a part of which is now occupied by the archæological bungalow and a museum which has been constructed to receive the numerous portable antiquities that have been brought to light. The remains so far exposed on the Bhir Mound comprise a number of streets and many houses built of rough rubble masonry, though there is good reason to believe that the upper parts of the walls of some of these houses at any rate must have been composed only of mud. The majority of these buildings belong to the two latest periods of occupation, but deeper digging undertaken at convenient open spaces has clearly shown that beneath the upper strata lie at least two earlier ones, and that virgin soil is reached at a depth of sixteen to twenty feet below the surface. A noteworthy feature of these remains are a number of wells constructed out of large earthen jars set one above the other with a hole through the base of each, which were used for the disposal of sewage from the houses. Similar soak-wells constructed in the same manner have, it may be observed, been found on ancient sites in Mesopotamia.

Among the numerous smaller antiquities found on this site special interest attaches to a collection of 1,167 silver coins and several pieces of gold and silver jewelry which were found in an earthen *ghará,* which was lying some six feet below the surface. Most of the coins are punch-marked Indian issues of various shapes and sizes, including a number of the local Taxilan types and others of such a small size that one wonders how they could have been used as an effective currency. The most interesting of these coins, however, are two of Alexander the Great and one of Philip Aridæus, besides a well worn siglos of the Persian Empire. The issues of Alexander and Philip bear on the obverse a head of Alexander wearing the lion's skin and on the reverse Zeus

seated on a throne with an eagle on his right hand and sceptre in his left, though the legends and monograms on the reverse differ. This is the first time that coins of Alexander the Great and Philip have been found in India. These coins are also valuable as they supply definite evidence as to the period when Indian punch-marked issues were in circulation, as well as the approximate date of the upper strata of buildings on the Bhir Mound. The lowest strata must be at least several centuries earlier in date.

The city site now known as Sirkap appears to have been founded during the supremacy of the Indo-Greeks in the second century B. C. and to have remained in occupation during the Scytho-Parthian and Kushán periods until the reign of Wima Kadphises. The excavations so far carried out comprise a large section of the main or high street running due south from the north gate of the city and several large blocks of buildings on either side of it. These buildings belong to the early Kushán or Parthian period, but comparatively few of the earlier buildings have so far been exposed. Among the former is a spacious apsidal temple of the Buddhists and several shrines belonging either to the Jaina or to the Buddhist faith. Most of the remainder are dwelling houses or shops of the citizens, and one at the south end of the excavations, which is distinguished from the other buildings by its great size and massiveness of construction, is probably a palace. This building has a frontage of 352 feet towards the High Street and from west to east it measures more than 300 feet. The oldest part of the palace dates from the Scytho-Parthian era, but there are numerous later repairs and apparently several additions. The excavated portion of the palace consists of five series of apartments arranged in groups around a central court. The large court in the centre of the west side with the chambers round about it contains the chief living rooms for men. This court is paved with blocks of limestone and has, on its south side, a raised dais with a frontage of twenty-eight feet and a depth of twenty feet. This probably was the court of private audience (*Díwán-i-Khás*). A smaller court to the south of this court served for the retainers and guards, and that on the north with its adjoining apartments for the *zanána*. The court at the south-east corner would seem to have been used for semi-official or public purposes (*Díwán-i-Am*), and that on the north of it for guests, etc. This building is the first of its kind yet found in India, and, although devoid of architectural magnificence or of decorative ornament, it is interesting inasmuch

CHAP. I. B. — History.

as it shows considerable resemblance in plan to the Assyrian palaces of Mesopotamia.

Taxila Excavations —contd.

The private dwelling houses on this site exhibit much the same plan as that of the palace described above, the unit of the design being the usual open quadrangle surrounded by chambers (*chatuhsāla*)—a unit which is repeated two, three or more times according to the amount of accommodation required by the occupants. The small rooms adjoining the street were usually reserved for shops. The walls, which are constructed either of rough rubble or of the diaper masonry which came into fashion at the beginning of the Kushán period, were covered on both faces with lime and mud plaster to which traces of paint are still found adhering. Wood was used for the fittings, such as doors, as well as for the roof beams and, in some cases, for panelling on the walls. A remarkable feature of these houses is the absence of any doors to give access to the interior of the rooms either from the open court within or from the streets outside. The most plausible explanation, according to Sir John Marshall, is that either the rooms on the ground floor served as mere foundations, in which case the interiors were filled with rubble, or as cellars or *tahkhānas*, which were entered by means of stairways or ladders descending from the rooms above. He also hazards the opinion that some of these houses which are of unusually large size and must have had two or more storeys, may possibly have served as residences for the professors of the ancient university and their pupils.

The *stúpa* shrines referred to above occur mostly in small courts adjoining the High Street. One such structure on the east of the High Street and in the block a little to the north of the palace, consists of a rectangular base adorned with a series of pilasters on each side. The drum, dome and umbrella of the *stúpa* have disappeared, but a small relic chamber in the base yielded a tiny gold casket containing a few calcined bones and a larger casket of steatite containing copper coins of the Scythian King, Azes II. This King was reigning about the beginning of the Christian era, and this must therefore be the approximate date of the *stúpa*. The *stúpa* in the next block, which is adorned on the front face with Corinthian pilasters, is coeval with the one noticed above. The spaces between the pilasters are occupied by niches of different varieties, each surmounted with a figure of a bird, apparently an eagle. One of these birds is a double-headed eagle, and the *stúpa* is accordingly described in the archæological publications as the *stúpa* of the double-headed eagle.

A discovery of exceptional importance made in this vicinity consisted of an Aramaic inscription engraved on a broken pillar of white marble. The document has been deciphered and found to contain an Aramaic translation of an Asokan edict. This is the first inscription in Aramaic characters yet found anywhere in India, and confirms the usually accepted view as to the derivation of the Kharoshthí script from the Aramaic characters.

The Apsidal Temple, which is also situated to the east of the High Street, stands in the middle of a spacious court reached by a double flight of steps from the street. It consists of a large nave with a porch in front and an apse behind, the whole surrounded by an ambulatory passage. The nave originally contained a *stúpa*, but it had been utterly destroyed by treasure seekers of some bygone age. The roof of the temple appears to have been of wood, and, to judge from coins found in the structure, its decay must be attributed to the latter part of the first century A. D.

The city of Sirkap is surrounded by a solid wall about six thousand yards in length and fifteen to twenty-one feet in thickness, and provided on the outside with large rectangular bastions. Built almost directly over the eastern fortification is a *stúpa* which has been identified with some reason with the *stúpa* which, according to Hiuen Tsang, had been erected by Asoka to commemorate the spot where his son Kunála, who had been sent to Taxila as his Viceroy, had had his eyes put out under the orders of his cruel and vindictive mother Tishyarakshitá The existing structure dates from the third or fourth century A. D., but inside it is an earlier *stúpa* of about the first century.

Sirsukh, the third and most modern of the cities of Taxila, is situated along the Lundi Nálá and was founded by the Kushâns probably during the reign of Kanishka. The surrounding rampart, which was eighteen feet six inches in thickness and provided with circular bastions, has survived only on the south and east sides. The interior is for the most part occupied by modern villages and graveyards, and only a very small area has so far been partially explored.

In addition to the three cities described above, there are many other monuments, mainly Buddhist *stúpas* and monasteries, scattered about over the face of the surrounding country and on the tops of hills. The most conspicuous monuments of this kind in the southern portion of the valley is the Dharmarájiká *stúpa*, now known as the Chír Tope from the great cleft which

CHAP. I, B. — History. Taxila Excavations —*contd.*

former explorers drove through its centre. It stands in the centre of a large plateau immediately above the Tamrá Nálá. The original *stúpa* was built in the time of the Scytho-Parthian rulers, but repaired and enlarged in the Kushán epoch and partly refaced again about the fourth century A. D. It is circular in plan with a raised terrace and an open passage around its base, which served in ancient times as procession paths. Probably the whole of the procession path was paved at one time with glass tiles, some of which may now be seen in the Taxila Museum. The ring of smaller *stúpas* around the main structure date from the first century B.C.; the chapels from a century or so later. Several of the *stúpas* yielded deposits of bones of ancient Buddhist saints and the relic found in one of them (S^8) was presented in 1917 by the Viceroy, Lord Chelmsford, to the Buddhists of Ceylon. Among the other structures to the south, east and north of the main *stúpa* special mention may be made of *stúpa* J^1, which is adorned with stucco figures of two different periods, separated from one another by debased Corinthian pilasters; two chapels (Nos. N^{17} and N^{18}) of the fourth or fifth century A. D., which contained colossal stucco images of Buddha attended by smaller ones; a well-constructed tank of about the first century A.D.; a building (H^1) to the north which seems to have contained an image of the Dying Buddha. A chapel (G^5) to the west of the main *stúpa* revealed some minute bone relics accompanied by an interesting silver scroll inscription in Kharoshṭhí characters stating that these relics of the Holy One (Buddha) were enshrined in a Bodhisattva chapel at the Dharmarájiká *stúpa* at Takshasilá in the year 136 (*cir.* 78 A.D.) for the bestowal of perfect health upon the great Kushán King.

A few miles from the Chír Tope, in a valley named Giri, an interesting group of Buddhist *stúpas* and monasteries is being brought to light. Among other important monuments that have been excavated in the northern portion of the valley and outside the ancient cities, those at Jandiál, Mohrá Morádu and Jaulián may be noticed here.

The mounds at Jandiál, due north of Sirkap, have yielded a unique temple which stands facing the north gate of this city. Its length over all is 158 feet, and its plan, which is unlike that of any temple yet known in India, is almost identical with that of the classical temples of Greece. Like the latter, it consists of a *pronaos* or front porch, a *naos* or sanctuary, and, at the rear, an *opisthodomos* or back porch, all surrounded by a wall pierced by large windows, in place of the peristyle of columns usually

CHAP. I, B — History. Taxila Excavations —*contd.*

found in Greek temples. The vestibule at the main entrance on the south has a pair of Ionic columns between pilasters at each end. Between the *naos* and the *opisthodomos* was a lofty solid tower resembling the zikkurats of Mesopotamia, which rose to a height considerably greater than that of the rest of the temple. From the evidence of coins found in it, the temple seems attributable to the Scytho-Parthian epoch, and as no Hindu, Buddhist or Jaina images have been found in it, Sir John Marshall is inclined to think that it belonged to the Zoroastrian religion. On the summit of the tower the faithful would offer their prayers to the sun while the inner sanctuary contained the sacred fire altar.

The monuments at Mohrá Morádu lie about a mile to the south-east of the city of Sirsukh and comprise a large *stúpa* and a smaller one and a monastery, all tolerably well preserved and standing to a height of between fifteen and twenty feet and still retaining many admirably executed reliefs in stucco on their walls. These reliefs represent groups of Buddhas and Bodhisattvas and other sacred figures, both standing and seated, and a particular interest attaches to the smaller reliefs on the front of the pedestals from the fact that they illustrate the dresses worn at the time these images were set up. The monastery consists, as usual, of a spacious central court with rows of cells ranged on its four sides, and preceded by a broad verandah, which, besides shading the front of the ground floor cells, served also to provide communication to the cells on the upper storey. The height of the lower storey was about twelve feet and there are windows in the back walls of the cells at a height of about eight feet from the floor. A discovery of exceptional value which was made in a cell of this monastery, is a *stúpa*, almost complete in every detail, circular in plan, and standing twelve feet high. A replica of this *stúpa* may now be seen in the main hall of the local museum. The apartments to the east of the main court of cells, where the monks resided, served as the Hall of Assembly, kitchens, etc.

The monastery was originally constructed in the second century A. D., but renewed and rebuilt in the fourth or fifth century, to which period many of the stucco reliefs are assignable.

The remains brought to light near the village of Jaulián are perched on the top of a hill some 300 feet in height and situated rather less than a mile north-east of Mohrá Morádu. These monuments are more highly ornamented and in a still better

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state of preservation than those at Mohrá Morádu, though the decoration of the buildings at Jaulián is not of quite so high a quality as that at the other site. The buildings at Jaulián were originally founded in the Kushán period, probably in the second century A. D. and synchronized with the city of Sirsukh. Until a generation ago there were remains of several old wells at the southern foot of the hill on which these buildings are situated, and these must have supplied the water required by the monks.

The buildings at Jaulián consist of a monastery of moderate dimensions and two *stúpa* courts standing on different levels with a third and smaller court adjoining them on the west. Access to these buildings was provided by three entrances, and the one most frequently used would appear to have been that at the north-west corner of the lower court. This lower court is a large open quadrangle with ranges of small cells intended for cult images along its sides and five moderate sized *stúpas* now roofed over for their protection but formerly standing exposed in the open. These *stúpas* have lost their domes and cylindrical drums, but their square bases are still adorned with rows of elaborate stucco reliefs. One of them *stúpa* D^5, bears a number of Kharoshthí inscriptions which give the titles of the images and the names of their donors. All the buildings in this lower court were erected in the fourth or fifth century A. D.

The main *stúpa*, which stands in a separate court of its own on a higher level on the south side of the court described, appears to date from Kushán times, but the masonry now visible as well as the stucco decoration belongs to two centuries later. Among the numerous small and richly decorated *stúpas* around the main edifice, special interest attaches to the one numbered A^{11}, to the south of the central *stúpa*. The relic chamber in this structure was exceptionally tall and narrow, and in it was a miniature *stúpa* of a very simple character, 3′-8″ high and modelled out of hard lime plaster and finished round the dome with gems of semi-precious stones. In workmanship, this relic casket is coarse and barbaric. The relics themselves were hidden within a small copper gilt receptacle at the bottom of a hollow shaft running down the body of the *stúpa*. Another small *stúpa* (A^{15}) on the west side of the main structure is engraved with Kharoshthí inscriptions supplying the names of the donors.

The monastery which stands to the east of the two *stúpa* courts mentioned above closely resembled the monastery at

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Mohrá Morádu both in plan and elevation. Some of the doorways of the cells are still intact, and the cell immediately to the left of the stairway on the northern side of the central court served as a shrine. It contains several clay images adorned with paint and gilding and including one that would appear to represent Maitreya, the Messiah of the Buddhists. Other groups of clay figures occur in the alcoves in front of some of these cells and in a niche to the left of the main entrance to this monastery. The group in front of cell 29 shows a Buddha in the centre, with several subordinate figures to right and left. The most striking of these figures is the figure of a male foreigner wearing a tunic, trousers with buttons for lacing, an ornamental belt, and a conical cap. These and other reliefs brought to light at Jaulián throw valuable light on the later history of Gandhára art.

Of the upper storey of the monastery no traces have survived, though the staircase referred to above leaves no doubt that the building had two storeys.

The whole of this establishment would appear to have been destroyed by a great fire not earlier than the 5th century A. D. This is to be inferred from the fact that among the numerous minor antiquities found in the monastery were a birch bark manuscript in Bráhmí characters of the fifth century A. D. which had been badly damaged by fire, and a burnt carnelian seal engraved with a Bráhmí inscription of the same period.

Another large and important group of Buddhist monuments near Taxila are those at the Bhallar *stúpa,* which occupy a commanding position on the last spur of the Sarda Hill which bounds the Háro Valley on the north. They are situated at the side of the Taxila-Havelián Railway at a distance of about 5 miles from Taxila. The Bhallar *stúpa* marks the spot where, according to Hiuen Tsang, the Bodhisattva in a previous existence sacrificed his head to feed a hungry tigress. Hiuen Tsang attributes the construction of this *stupa* to the Emperor Asoka, but, if ever Asoka erected a monument here, no trace of it is now discoverable. The existing *stúpa* dates back no further than the third or fourth century A. D. Like the Kunála *stúpa* referred to above, it stood on a lofty oblong base, and the body of the superstructure above this base consisted, as usual, of a drum and a dome surmounted by one or more umbrellas. The northern half of the *stúpa* has entirely fallen, but the existing portion has been suitably preserved. Numerous chapels and other monuments have been brought to light in the courtyard of the *stúpa* and a spacious monastery to the east of it. It was in this monastery, says Hiuen Tsang, that Kumáralabdha, the founder of the Sautrántika School, composed his treatises.

EARLY REIGNS.

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From the reign of Asoka, the Buddhist Emperor of Upper India, we may suppose Buddhism to have taken root in the Northern Punjáb but Taxila again fades from Buddhist history till A. D. 400, when it was visited as a place of peculiar sanctity by the Chinese Buddhist pilgrim, Fa Hian. After Asoka there is no direct mention of the district, and the period is one of great darkness. Doubtless, the whole tract formed part of the kingdom of Eucratides the Greek, who about 170 B. C. extended his power over the Western Punjáb. The Indo-Greek kings held the country after him, being at last ousted (about 80 B. C.) by the Indo-Scythians. At any rate, when Hiuen Tsang, the most famous of the Chinese pilgrims, visited the district in A. D. 630 and again in A. D. 643, Buddhism was rapidly declining. The Bráhman revival, to which India owes its present form of Hinduism, had already set in, in the early years of the fifth century, and must have been at its height in the days of Hiuen Tsang.) From this time the light afforded by the records of the Chinese pilgrims fails, and a long period of darkness swallows up the years that intervened before the Muhammadan invasions and the beginning of continuous history. The country was under the dominion of the Hindu kings of Kashmír, and probably so remained till the end of the 9th century. After that, the district formed part of the kingdom of the rulers of Kábul, Sámanta Deva and his successors (more accurately designated as the " Hindu Sháhis of Kábul ") who remained in possession till the times of Mahmúd Ghaznaví. Ánand Pál and Jai Pál, of whom the histories of Mahmúd's invasions make mention as kings of Lahore, were Sháhi kings. In the meantime the Gakkhars had grown strong in the hills to the east, but their dominion never extended beyond the Margalla pass and the Khairi Murat.

The Muhammadan invaders.

The first authentic event of modern history peculiarly connected with this district is the battle between Mahmúd Ghaznaví and the Hindu army under Ánand Pál in A.D. 1008, in which the invader was nearly defeated by the impetuosity of an attack made upon his camp by a force of 30,000 Gakkhars. This battle, which decided the fate of India, is said to have been fought on the plain of Chhachh, between Hazro and Attock on the Indus. It ended in the total defeat of the Rájpút confederacy, and India lay at the mercy of the Muhammadan invaders. It is probable that Islám in the district dates from this time. Knowing what we do of Mahmúd, it is certain that Islám would be imposed on all as the only way of obtaining peace, though these unwilling converts may have reverted to Hinduism as soon as his back was turned, and

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there are indications that the general conversion of the people took place some centuries later. During the reigns of the succeeding Sultáns of Ghazna there were many invasions of India, but though the district lay in the path of the invading hordes, there is no special event on record connecting them with it. The northern portion of the tract was in 1205 the scene of the quarrel between the Gakkhars and Shaháb-ud-dín Ghorí. Having defeated and massacred the Gakkhars and restored order in India, Shaháb-ud-dín, returning westward, was camped on the banks of the Indus. His tent being left open towards the river for the sake of coolness, a band of Gakkhars swam across at midnight to the spot where the king's tent was pitched, and, entering unopposed, despatched him with numerous wounds.

Through the 13th century Ghaznavid and Afghán incursions continued. In the 14th century the Mughals came, and to this day there survive the remnants of Mughal settlements in the Attock and Fatehjang tahsíls. It was across the Attock tahsíl that Timúr marched to throw all India into confusion.

In 1519 A.D. Bábar marched through the district and crossed the Soán on his way to Bhera, Khusháb and Chiniot. He was often in the district again. On his 5th invasion, in 1525, he marched along the foot of the hills from the Háro to Siálkot, and noticed the scarcity of grain due to drought, and the coldness of the climate, pools being frozen over.

TRIBAL HISTORY.

But all these heroics have little internal connection with the history of the tract. The great portion of the district lying south of the Kála Chitta was out of the track of the invading armies, and the various tribes rather propitiated the foreign conquerors by gifts of horses and hawks than invited attack. The Chhachh was a desolate marsh, and no part of the district was rich enough to excite the rapacity of Afgháns and Mughals. The real history of the district is tribal. The Janjúas are the first who appear to have been in dominant possession of the country. Nothing is known of the history of their kingdom, but their present distribution and tradition encourage the belief that they held the whole country north of the Salt Range between the Indus and the Jhelum. Bábar in his memoirs says that the Janjúas had from old times been the rulers and inhabitants of the Salt Range, and of "the *ils* and *ulúses*" which are between the Indus and the Jhelum. Their power was exerted in a friendly and brotherly way over "Jats and Gújars, and many other men of similar tribes, who build villages, and settle on every hillock and in every valley." They took a share of the produce fixed from very remote

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Tribal history.

times, never varying their demand. In Ráwalpindi district they were dispossessed by their ancient enemies, the Gakkhars. In this district the first successful attack on them was probably made by the Khattars. At the same time bands of Afghán invaders came from across the Indus and settled on the river bank. The Khattars claim to have come to the district with the earliest Muhammadan invaders, and were probably originally natives of Khorásán. Whatever their origin and whatever their connection with the Awáns and the Khokhars, they were probably established in the district before the advent of the former tribe. The Awáns are said to have entered the district from the south by the way of the Salt Range and to have spread to its northern limits. While they were settling down in this tract and confining the Khattars to the country they now possess, the Alpiáls seem to have been wandering about in the Khusháb and Tallagang tahsíls before finally settling down in their present home on the upper Soán. The Ghebas, too, were migrating from the south, and about the beginning of the 16th century took possession of the present Gheb *iláqa*. The Jodhras also may have come about the same time. The probability is that the Khattars dispossessed the Janjúas of an outlying portion of their dominions, that the Awán invasion was the first really vital blow to Janjúa power in the district, and that their immigration continued for many years. With them came other wandering tribes, Alpiáls, Ghebas and Jodhras, who held their own with the more numerous Awáns, or aided by later reinforcements wrested from them portions of the country they had seized. The fortunes of each tribe must have fluctuated greatly, and each must have gained, held and lost many different blocks of country before they finally settled down.

Mughal rule.

This process was probably going on during the Mughal rule. The district was then included in the Sind-Ságar Sarkár, which included the whole of the Sind-Ságar Doáb. The *Aín-i-Akbari* throws but little light on the state of the tract at that time. The whole Sind-Ságar Doáb was divided into forty-two *mahals* or parganas. From these the Awán, the present Awánkári, held by Awáns and paying Rs. 10,399 revenue, can be identified as including Tallagang tahsíl and part of Sháhpur; Attock Banáras, the name given to Attock by Akbar to distinguish it from Katak Banáras at the other extremity of the empire, probably comprised Chhachh and the upper part of the Khattar country; Neláb included the rest of the Khattar and some trans-Indus territory; and Akbarábád Terkhery (Takhtpari) was made up of parts of Ráwalpindi, Fatehjang and Gujar Khán. The Gakkhars at one period appear to have extended their rule over Fatehjang

Soán and Asgam. But the Mughal sway was always more nominal than real. They appear to have been content to levy revenue, and there is nothing to show that any serious government was attempted. The whole district paid revenue of only about half a lakh of rupees, and the heads of each tribe were practically independent though tributary princes. There is no account in the *Aín-i-Akbarí* of any tribe inhabiting the district. The Mughal emperors constantly passed through Attock Tahsíl on their way to their favourite summer resort in Kashmír, but the district was not a place worth holding and administering.

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During the rule of the later Mughals the district was prominent merely as the road by which the invading armies of Nádir Sháh, Ahmed Sháh, Tímúr Sháh Duráni, and Zamán Sháh advanced to Delhi. The court of Delhi was too much engrossed in its luxuries and pleasures to attend to any enemy until that enemy was at its gates, and the invaders hurried on through the district without opposition from the Mughals or from the local population. The great tribes of the district were left to their own devices amidst the turmoil of the empire. The tribal heads were considered as, and enjoyed the privileges of, independent chieftains, paying no revenue to the Government of the day beyond an occasional present of a horse, a mule or a hawk by way of *nazrána* or tribute. In the decay of the Empire the local tribes waxed more and more independent in the absence of any settled government. None of the Sikh *misls* had their home in the country north of the Jhelum, and the District long remained more or less nominally under the rule of the Duránis.

Sikh rule.

Meanwhile the Sikh power was steadily growing and advancing. In 1765 Gujar Singh, Bhangí, had defeated the Gakkhars at Gujrát. In a few years he crossed the Jhelum, extended his power to Ráwalpindi and subjugated the warlike tribes of Ráwalpindi and the Salt Range Hardly had the Sikhs well established themselves in Ráwalpindi before the more valuable portions of the district came under their sway. The rich Soán *iláqa* of Fatehjang was at once seized by Sardar Chattar Singh, Sukerchakia, and its history is that of Ráwalpindi. But there was little to tempt Sikh avidity in the rest of the district, and it was not till Sikh power was consolidated under Mahárája Ranjít Singh that the district as a whole came under Sikh dominion. The Attock Tahsíl and the north of the Fatehjang lay across the road to Peshávar, and the Sikhs took it under direct management from early in the 19th century. Revenue was collected by appraisement, and only at a later date were leases given. The country remained off and on under the management of Bhái Máhn Singh till annexation. But the rest of the district, after the break up

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Sikh rule—*contd.*

of the Mughal empire, and until Mahárája Ranjít Singh was firmly established as ruler of the Punjab, was the battle-ground of the strong tribes which still own it. The Ságrí Patháns from Kohát drove the Awáns out of Makhad and the other tribes, Jodhras, Ghebas, and Khattars settled down to the limits which substantially form their boundaries to this day. To this tract the Sikhs came about 1789, but their rule extended to these rude tribes at a comparatively late date, for the people were hardy and warlike, and the barren desolate plains presented little hope of profit to the Sikh Kárdárs of Lahore. Even up to the day when the British Government was introduced into the tract, the Sikh system in its completeness was never introduced. Elsewhere the Sikhs enforced a rule and imperfect order, but this tract was too distant to make entire subjection of any strategical importance, and too poor to repay the cost of good government. The task of breaking the prominent chieftains and reducing to order and submission the compact tribes who looked up to their chiefs was probably not beyond the powers of the Sikhs, but it was not worth while. The authority of the Lahore Government was generally admitted and often asserted, but, subject to that admission, the people were left to wrangle among themselves, and to settle their own disputes with sword and dagger. Tribal authority was relied on to keep society together and prevent anarchy, and revenue was the only care. But realization through Kárdárs by appraisement of the crop was a method not suited to the constitution of district society. From the very first the tribal chieftains took the place occupied in other districts by Kárdárs. The Makhad *iláqa* was always leased to the Khán, who collected by appraisement from his tribesmen. The town of Makhad itself always held a Sikh garrison, but in the villages around the Khán was left to himself. As early as 1789 Sardár Mahá Singh, father of Mahárája Ranjít Singh, gave a lease of the whole of Tallagang, all Pindigheb, except Makhad and the Gheba *iláqa* of Fatehjang to Malik Amánat Khán for Rs. 6,900. In the nineteenth century the Kaliánwála family were, with the exception of two short breaks, continuously in possession of the tract as jágírdárs. But whoever held it endeavoured to realize revenue through the Jodhras of Pindigheb, and with that remained content. Whether it was Fateh Singh or Dúl Singh, Kaliánwála (1798—1825), Dhanna Singh, Málwa (1825—1828, 1829—1832, and 1832—1844) or Budh Singh, Sindiánwála (1828), a lease was always offered to the reigning chief of Pindigheb. Even when it was refused by the Jodhras (Malik Nawáb Khán refused the lease in 1798), and the Sikhs had to administer directly, the large owners in the Gheba, Jodhra and

Sikh rule—*contd.*

Makhad country had to be placated by grants of *chahâram* or remissions of one-fourth of the whole revenue collections. Sometimes the people paid and sometimes they did not. Every family had its feud and every village its part *parties* and so, wrangling and fighting, the administration went on until the Sikh rule fell, and Lieutenant Nicholson appeared to represent the Sikh Darbar. The last 30 years of Sikh rule were a record of murder, treason and incompetence almost unparalleled. The Sikh Kárdárs, not strong enough to enforce their authority, did not scruple to set family against family, and to instigate and reward murder and treachery. Hardly a gleam of chivalry shines through the blood-stained record of the family feuds, in which first one chief and then another lost their lives, seldom in open battle, generally by treacherous stab or midnight murder. The most important incident of this period is the gradual decline of the Jodhras of Pindígheb and the rise of the Ghebas. At first responsible for the whole of Tallagang, a part of Chakwál, the greater portion of Pindigheb and much of Fatehjang, the Jodhras by their own weakness and incompetence lost almost all. Their chiefs were men of loose and intemperate habits, too lazy to undertake the trouble and responsibility which commanding authority involved, and politically too short-sighted to see the goodly heritage they were throwing away. The decline of the family began in 1798, when Nawab Khan refused the contract for the revenue. From that date the Dandi Langrial villages were lost for ever, the *chahâram* rights being surrendered a few years later. In 1803 the Sil ilaqa was restored to the family. Ten years later Malik Nawab Khan, thoroughly dissatisfied and shorn of the larger portion of his ancestors' wealth and state, rebelled and joined Dost Muhammad Khan, Amir of Kabul, at the time that chief was waging war with Sikhs on the bank of the Indus. Dost Muhammad was defeated and retraced his steps to Kabul, whither Nawab Khan followed him, leaving his family at Kohat. One or two years afterwards he returned, died at Peshawar and was buried at Kohat. His younger brother, Malik Ghulam Muhammad, then entered into negotiations with Sardar Dul Singh, Kalianwala, Jagirdar, and obtained through him the *chahâram* originally granted to Nawab Khan and permission to reside at Pindigheb. He was also entrusted with the realization of the revenue of ilaqa Jandoodial, situate on the bank of the Indus and inhabited by a body of freebooters. The rest of the tract was directly managed by the Sikhs. But in 1825 the ilaqas of Sil, Khunda, Khaur, Kamliár and Gheb were divided between Malik Ghulam Muhammad and Rae Muhammad Khan, Gheba of Kot. Both aided the Sikhs in their war with Sayad Ahmad,

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Sikh rule—*contd.*

the fanatic leader, who having been compelled to retire from Peshawar, which he had for some time absolutely ruled, had made Bálakot in Hazára his headquarters. Ghulam Muhammad fought under Attar Singh and Budh Singh, Sindhanwalia, against Sayad Ahmad at the battle of Akora, near Attock in 1827, and Rae Muhammad Khan under Prince Sher Singh and General Ventura at Bálakot in 1830.

Neither chief could realize in full the demand for the tract leased to him. In 1829 the arrears amounted to Rs. 1,62,203, out of which only a small sum was collected with difficulty. For the balance Malik Ghulam Muhammad and his son, Malik Állayar, and Rae Muhammad Khan and his son, Fateh Khan, were summoned to Lahore. Malik Allayar and Rae Fateh Khan were confined as hostages, while their fathers remained at large. In a quarrel which took place between the latter Rae Muhammad Khan cut down Malik Ghulam Muhammad Khan in open Darbar at Amritsar and fled to his home. It was not thought politic to punish him at the time as his services were urgently needed on the side of Government in a wild country where the Sikh Kárdárs never gained full power, and we find him next year rewarded for his services against Sayad Ahmad. But a heavy fine was imposed and security taken for the arrears of revenue. The ancient enmity between the two families was now inflamed to fever heat. Sardar Atar Singh, Kalianwala, who was in charge of the tract, following the usual Sikh policy, seized the opportunity. In 1831 Rae Muhammad Khan was murdered in his own fort of Págh with every circumstance of treachery and cruelty. Colonel Cracroft's description of the affair is as follows :—

"The tract was again given to Sardar Attar Singh, Kalawalla, who this time was determined to get rid of one of the most troublesome of the subjects of the Mahárájá. He invited Rae Muhammad Khan, loaded him with presents and honours, and immediately left for Peshawar. On his return six months after, he invited the Rae to the fort of Págh, situated about a mile from his hereditary seat, Kot. With the recollection of his former reception fresh in his memory, Rae Muhammad Khan would not listen to the advice of his retainers and friends to take an escort, but went to the Sirdar with only a couple of followers. Scarcely had he set foot inside the fort, when he was attacked by Budha Khan, Mallál, and others, and cut down. His son lived to avenge this treacherous murder by the wholesale slaughter of Budha Khan's family, leaving only the latter and a young nephew, who are still alive and are, as may be supposed, the bitter enemies of the Sirdar."

This murder at Págh, if they had but known it, was the worst thing possible for the Jodhras. It opened the way for Rae Fateh Khan. Throughout the stormy times that followed, Fateh Khan, who had lost all his near relations by murder, but who had never failed to avenge their deaths, forced his way up to power, and extended his influence, until at annexation he stood at Kot almost without a rival in the countryside. He was a really remarkable man, strong and daring, generous and loyal to his friends, harsh and treacherous to his enemies, respected and feared by all, and he proved himself as able to consolidate his position under English rule, as he had been able to acquire in the days of anarchy. He died in 1894, at the age of more than 100 years, vigorous to the last and regarded by the whole district as the model of what a man should be. On the other hand Malik Allahyar Khan, who succeeded the murdered Ghulam Muhammad, was a man of loose and intemperate habits with neither force of character nor political aptitude. In 1835 Sultan Singh, Kárdár, was murdered while collecting revenue at Khunda. Cash payments were then fixed instead of crop appraisements, and the Khunda, Khaur and Kamlial ilaqás passed for ever from the Pindigheb family into the hands of the resident communities who in future themselves enjoyed the *chahárams.* The last and great chance was lost at annexation. The whole district was over-assessed, the difficulties of collection were enormous, and the village communities were eager to throw their heavy burden on the Malik's shoulders. Right to property in land was a thing unknown, the Malik was by the voice of the country the real proprietor. Nicholson was ready to do much for the Pindigheb family. But Malik Allahyar remained deaf to the entreaties of his friends. He declared that nothing should tempt him to plunge himself into such a sea of trouble as the direct management would entail, and he looked only to the *chahâram.* So from a love of ease he allowed a splendid property to slip through his fingers. The opportunity did not occur again.

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History.
Sikh rule—*concld.*

The Sikh wars and the Mutiny.

The tribes of the district, with one notable exception, took no share in the First Sikh War. Fateh Khan alone appreciated the weakness of the Lahore Government. In 1845 he rose in revolt, but in August 1846 surrendered to Sardar Chatar Singh, Attáriwala, who thought of employing him to suppress future disturbances in the district. But two months later Misr Amir Chand, through folly or treachery, released him and he again took up arms against the Government, until through the influence of Colonel Lawrence, he was again induced to yield.

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History.

The Sikh wars and the Mutiny—*concld.*

During the Second Sikh War, 1848-49, all the tribes of the district threw in their lot with the Darbar and the British. Abbott was shut up in Hazára. Herbert was besieged in Attock fort. Nicholson like a stormy petrel was flying about Ráwalpindi and Jhelum. In Bannu Taylor with a small force of raw levies was holding out, while further south Edwards was carrying on his famous operations in Multan. The district was therefore of much strategic importance. On the loyalty of the tribes of the district depended the security of communications between the scattered British officers and the possession of the ferries of the Indus. These important duties were performed with conspicuous success and loyalty. Fateh Khan of Kot and Malik Allahyar of Pindigheb both raised bodies of horse and foot to keep open the communications, and the former on several occasions engaged parties of the rebels with success. Makhad in particular was a place of importance. The Khan resisted all attempts of the Sikh and Afghan leaders to win him over. Not only did he maintain himself in Makhad and Shahardarra, but he also succeeded in an attack on the fort of Jabi, then garrisoned by the Sikh insurgents. In Attock Tahsil Karm Khan, Khattar, of Wah, raised a force of horse and foot which Nicholson employed in holding the Margalla pass, and his son, Muhammad Hayat Khan, joined Nicholson at Nera with a few recruits, and remained with that officer till the close of the war. Firoz Din of Shamsabad served with Nicholson at Rámnagar, Margalla, Pind Dadan Khan and elsewhere, and the Gondal family also did good service in the provisioning of Attock fort. Herbert's unsuccessful defence of Attock was the principal event connecting the district with the war. This loyal attitude was maintained in 1853 when Nádar Khan, the chief of the Mándla family of Gakkhars, attempted to raise an insurrection in favour of a person who pretended to be Prince Peshaura Singh, the reputed son of Mahárája Ranjít Singh, and again in 1857. It was Sher Khan, Alpiál, who brought Nádar Khan's insurrection to light. During the Mutiny the chief assistance rendered was in guarding the ferries of the Indus.

SUBSEQUENT HISTORY.

Lawlessness and crime.

Since annexation the history of the district is one of quiet development, more social than political. Probably no tract in the Punjab has undergone greater development.

As a separate administrative division, the district dates only from 1904. Previously the tract with the exception of Tallagang formed a part of Ráwalpindi District from the greater portion of which it was very distinct in character. The tradition of lawlessness did not soon die out.

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History.

Lawlessness and crime—*contd.*

Writing in 1864, Colonel Cracroft says:—

"In former years, the high roads were universally unsafe. Passing through the limits of different tribes, travellers and caravans had to satisfy the rapacity of each by paying black mail, or they had to submit to be plundered, outraged and ill-treated—happy sometimes to escape with life. This was particularly the case in the western part of the district. It is not many years ago, that even under this order-loving rule, crimes were perpetrated of a nature to curdle the blood and to make one despair of achieving success. Let two or three examples suffice."

The most famous case is that of the Jandál murders, of which the following description is taken from the old *Gazetteer*:—

The sub-division of Pindigheb is noted for the violence of the passions of the men, and the fierce blood feuds, which from time immemorial have rendered the region a scene of violence and bloodshed. In a village called Jandál, situated in the tract called Bálágheb, or Uppergheb, and inhabited by Ghebás calling themselves Rewáls of Mughal descent, a case occurred of a young woman, a widow, the daughter of the principal man of the place, called Mahmúd, wishing to marry a person, Shah Nawáz, who belonged to the faction opposed to her father. She had lost her husband two or three years before, and according to the custom of the country was considered the property of her deceased husband's brother, a boy only eight years of age. She formed a fatal attachment to Shah Nawáz, and had several clandestine meetings with him, but the thing was kept secret; not so secret unhappily, but that the father began to entertain suspicions. One afternoon not long before dusk, Mahmúd asked his daughter casually, whether she had had any intercourse with Shah Nawáz. She replied that she wished to marry him. Nothing more was said at the time. When night set in, Mahmúd collected his followers, struck off his daughter's head and threw her body into the street. Proceeding to the *Hujra*, or assembly room of Shah Nawáz, he surrounded it. Six persons were sleeping, and some cattle tethered in the house. One of the sleepers was a barber entirely unconnected with the parties. He had come to the village that evening on business. There were only two openings to the *Hujra*. One was a door of ordinary dimensions in front, and the other a small window in rear. Piling thorns and wood to both apertures, Mahmúd and his followers set fire to them. The whole place was soon in flames. The unhappy inmates could not escape. Two of them attempted to unroof the house, and succeeded in getting out, but on reaching the ground they were instantly cut down. The perpetrators of this monstrous crime escaped, and took refuge

CHAP. I, B. — History. Lawlessness and crime—concld.

with the Afrídis of Boree and Jana Khor, sometimes shifting their quarters to Sitána, from which places they continued for many years, as outlaws, to commit depredations in our territories. Their property was confiscated by the State, and made over in compensation to Fateh Khan, the present lambardár, one of the only survivors. It is scarcely credible, but a fact, that when Major Becher, Deputy Commissioner of Hazára, in order to put an end to the continual anxiety, trouble and loss of property occasioned by these outlaws, gave them service in regiments engaged during the mutinies, and subsequently condoned their offence, allowing them to return to their homes, Fateh Khan wished to restore to some of them their proprietary rights. So light in the estimation of these wild people is human life held. Apart from the murder of his own relatives Fateh Khan doubtless considered the act praiseworthy, and the feeling is shared by the whole population.

The same authority gives the following description of the murders of merchants in the "Chitta Pahár":—

On one occasion a trader had given offence to the Khattars by exaction of payment of a debt. Having some business at Attock, he started with his mule, and reached a solitary spot where he was seized upon, plundered and killed. His head, hands, and feet were cut off, and placed in the mule's bags. The mule turned homewards carrying the remains of the deceased to his relatives.

Five Khatris were travelling from Attock to Domel, and had to pass through the Khoora, a dell in the Chitta Pahár. It used to be a wild, lonely place, a fit spot for any dark deed. Here they were set upon, massacred, and mutilated, their legs and arms cut off, and their bodies thrown about without much attempt at concealment. This case occurred in 1855 A.D. No clue whatever was obtained of the perpetrators of the crime.

In the Chhachh, too, crimes of violence were frequent. Both in this region and in the Khattar the kidnapping of traders occasionally took place. The mosques were filled with Tulaba-ul-ilm or so-called scholars, living on charity and ready for any kind of mischief. The expulsion of this class had a marked effect on the amount of crime.

From these early days the advance in order and lawfulness has been great. In 1859 the Gheba ilaqa was detached from Pindigheb, and along with other ilaqas formed into the present Fatehjang tahsil. This had a most excellent effect, the ran-

CHAP. I, B.

History.

corous enmity of Jodhras and Ghebás no longer finding a battle-ground.

Constitution of District and Administrative Charge.

The district was constituted on 1st April 1904, Tallagang Tahsil being taken from Jhelum District, and the other tahsils from Ráwalpindi District.

The following have held charge of the office of Deputy Commissioner :—

B. N. Bosworth Smith, Esq.	April 1904 to May 1904.
Mr. C. F. Usborne	May 1904 to June 1904.
B. N. Bosworth Smith, Esq.	June 1904 to July 1904.
Mr. C. F. Usborne	July 1904 to September 1904.
B. N. Bosworth Smith, Esq.	October 1904 to July 1907.
H. Fyson, Esq.	July 1907 to September 1907.
B. N. Bosworth Smith .Esq.	October 1907 to April 1909.
F. H. Burton, Esq.	April 1909 to May 1911.
R .B. Whitehead, Esq.	May 1911 to July 1911.
F. H. Burton, Esq.	July 1911 to March 1914.
H. Calvert, Esq.	March 1914 to November 1915.
M. S. D. Butler, Esq., C.I.E., C.V.O. ..	November 1915 to July 1919.
P. J. Rust, Esq.	July 1919 to September 1919.
Miles Irving, Esq.	September 1919 to May 1920.
Khan Bahadur Chaudhri Sultan Ahmad ..	May 1920 to November 1920.
Miles Irving, Esq.	December 1920 to December 1921.
H. M. Cowan, Esq.	December 1921 to January 1925.
E. C. Marten, Esq.	January 1925 to March 1925.
C. C. Garbett, Esq., C.M.G., C.I.E. ..	March 1925 to March 1927.
L. A. Bull, Esq.	March 1927 to November 1927.
C. C. Garbett, Esq., C.M.G., C.I.E.	November 1927 to April 1929.
Mian Amin-ud-Din	April 1929 to November 1929.
B. H. Dobson, Esq., C.B.E.	November 1929 to February 1930.
Mian Amin-ud-Din	February 1930 to October 1930.
Cuthbert King, Esq.	October 1930.

Section C.—Population

FLUCTUATION IN POPULATION.

DIVISION.	TOTAL POPULATION.					PERCENTAGE OF INCREASE (+) OR DECREASE (—).		
	1881.	1891.	1901.	1911.	1921.	1901 on 1891.	1911 on 1901.	1921 on 1911.
Tahsil Attock ..	..	141,063	150,550	161,351	173,472	+6·7	+7	+7
Tahsil Pindigheb	..	99,350	106,437	126,300	120,097	+7	+19	—5
Tahsil Fatehjang ..	..	113,041	114,849	116,204	110,179	+1	+1	—5
Tahsil Tallagang	..	94,966	92,594	115,418	108,501	—2·5	+25	—6
Total ..	444,307	448,420	464,430	519,273	512,249	+3·5	+11·8	—1·4

CHAP. I, C.

Population.

Fluctuation in population—concl d

The unevenness of these figures is due partly to the fact that in bad years many of the tenants and smaller landowners do not get enough out of the lands to keep themselves alive and have to leave their villages and work as labourers : partly to fortuitous circumstances occurring in the census year. In 1881 the figures were swollen by a large influx of labour required for the Railway: 1891 was a "locust" year : the Kharif of 1900 was not bad : but the four preceding harvests had been very bad and the cultivated area had decreased appreciably. The emigrants had not returned by 1901. These census years were thus abnormal, and the abnormality is proved by the greater fluctuations in the more uncertain tahsils of Pindigheb and Tallagang in the decade ending 1911 as compared with the comparatively stable tahsils of Fatehjang and Attock. The rise of 25 per cent. in one and 19 per cent. in the other could not have been due merely to fecundity.

Similarly the decrease in 1921 must have been due to temporary emigration as a result of the famine year 1920-21 when only 7 per cent. of the cultivated area reached maturity. At such times it is mainly the men in the prime of life who go off to seek work : and thus we find that in the Tallagang tahsil the males between 20 and 40 years of age fell from 153 per thousand in 1911 to 137 per thousand in 1921. In this tahsil 70 out of 89 *abadis* showed a smaller population in 1921 than in 1911.

It follows that all averages and figures, based on census records may differ from those to be found in settlement reports, and great fluctuations are to be expected in an unprotected district such as this when compared with the normal irrigated districts of the Province.

DENSITY OF POPULATION.

The following table gives the incidence of the population per thousand acres of cultivation at the end of each census decade :—

Tahsil.	1891.	1901.	1911.	1921.
Tallagang	291	310	352	324
Pindigheb	344	381	432	403
Fatehjang	465	459	459	446
Attock	670	754	805	887

CHAP. I, C.

Population.

Density of population—*contd.*

According to the census of 1921 Attock District with 122 persons to the square mile of total area stands 25th among the districts of the Punjab in the density of total population on total area. More than half of the area is unculturable. The pressure of the rural population on the cultivated and culturable area is 281 and 233 to the square mile, respectively. The density of the population per square mile under crops matured on the average of the last ten years (1913-14 to 1922-23) is 455. Although with respect to the density of the rural population on the cultivated area, the district stands so low as 27th, yet if the area of matured crops alone be looked to, the district is behind none but the most congested tracts in the Province.

The marginal table gives the density of the rural population on the total and the cultivated area in the natural and administrative divisions. The density of the population thus varies very widely throughout the district. There are few plain tahsils with so sparse a population as Tallagang. More than two-fifths of the total area is not available for cultivation, but even on the cultivated area the population is very far from dense. In Pindigheb, population is even sparser than in Tallagang, but it presses much harder on the cultivated area. Almost two-thirds of the total tahsil area is uncultivated, and more than a half is unculturable. Comparatively, the pressure of the population on cultivated area in Pindigheb, even if the valley of the Sil be excluded, is more severe than in Tallagang.

Division.	Rural population, 1921.	Density per square mile of total area.	Density per square mile of cultivated area.
Tahsil Attock ..	155,044	242	500
Tahsil Fatehjang	110,179	128	280
Tahsil Pindigheb..	110,678	74	235
Tahsil Tallagang ..	102,063	85	194
Chhachh } Attock Tahsil.	66,208	487	744
Sarwala } Attock Tahsil.	34,099	148	396
Nala } Attock Tahsil.	54,734	193	405
District ..	477,964	113	281

On the other hand, the fertile Chhachh maintains a population as dense as that of almost any congested district in the Punjab.

CHAP. I, C.

Population.

Density of population—*contd.*

The district contains one cantonment, seven towns and 612 villages. The population of the former are shown in the margin. Pindigheb is only a large village with but little trade, and owed its rise originally to the fact that it was the headquarters of the Jodhra Maliks, while now it is the headquarters of the tahsil. At each census the population has shown a slight decrease, and the town will probably degenerate into a purely agricultural village as trade concentrates more in the centres on the railway. Hazro, though with more trade, and more urban characteristics, is also decreasing ; Attock decreasing as fast as Campbellpur increases. The headquarters of the Sub-division at Attock have been removed, and the creation of a new district with headquarters at Campbellpur has given an impetus to the latter town. In 1921 there was a cantonment in Attock, but it terminated in 1925-26. The fort only is garrisoned and that lightly.

Town.	Population.
	1921.
Attock	1,154
Hazro	8,414
Campbellpur Civil Bazar	3,669
Campbellpur Cantonment	6,181
Pindigheb	9,928
Tallagang	6,438
Fatehjang	4,553
Hasan Abdal ..	5,538

Only 7 per cent. of the total population was classed as urban at the last census.

The table in the margin taken from the census of 1921 shows, how the population is distributed in villages in the various tahsils. The Tallagang figures are misleading. They show not the number of people who live in each *abadi*, whether it be the parent village or an outlying hamlet, but the number of inhabitants of each estate : and in some cases, *e.g.*, Lawa, an Estate consists of what elsewhere would be reckoned as several villages. The difference between Fatehjang (551 inhabitants in each village) and Pindigheb (826 inhabitants in each village) corresponds to a real difference in development. The culturable but still uncultivated area is much smaller in the former tahsil than in the latter. The dispersion of the population has gone much further. Physical and political conditions are different. The unculturable areas lie in blocks, not as in Pindigheb scattered through every village. The village areas are very much smaller, and the population in each village is therefore less. The Attock villages are slightly smaller

Tahsil.	Number of villages.	Population per village.
Attock ..	192	808
Fatehjang ..	200	551
Pindigheb ..	134	826
Tallagang ..	86	1,187
District ..	612	781

than the district average. Political conditions forced the agriculturists to cluster together in small communities on the patches of good soil which could not maintain a very large body of cultivators. In Pindigheb the village communities settled on wide stretches of poor soil, and in the prevailing anarchy there was security only in large numbers. In Attock the soil is richer, though only in the Chhachh very fertile. The ownership was by peasants and not by tribal chiefs and families. Large village communities were never a necessity. Consequently the population of each village is on the average smaller than in Pindigheb and Tallagang.

The great majority of all villages have a population of less than 500 inhabitants. In Fatehjang, where there is no village of over 3,000 inhabitants, over 60 per cent. of the villages have less than 500 inhabitants. Excluding the small towns only Narrah in the Pindigheb tahsil has a population of over 5,000.

The tendency is for the farmer to live in his homestead. In the earlier and less secure days the tenant preferred to live near his powerful landlord : and thus the bigger villages came into beings. But on a countryside split up by ravines, parcelled into long strips of holdings, where the only means of improvement are by manuring and embankment the careful peasant prefers to settle near his fields, so that they may benefit from the manure afforded by his cattle and he may protect and gather the harvest for which he has laboured. The population is thus becoming more and more scattered among isolated "*dhoks*" or "*bahaks*" as they are more commonly called.

In Tallagang, village areas are enormous and are studded with *dhoks* or outlying homesteads, sometimes fair-sized villages in themselves. The largest estates must always have had *dhoks* of the kind that are small villages in themselves, the more distant lands being out of reach from the main abadi. The size of these villages is enormous. Lawa has an area of 131 square miles, Thoa Mahram Khan of 81 and Trap 37 square miles. The number of *dhoks* is sometimes very large. Fifteen or 20 are not uncommon, and Thoa Mahram Khan has over a hundred. In Tallagang in process of time many *dhoks* have waxed mightily, and many of the old tenants have become owners. In such cases the want of community of feeling at once becomes apparent, each *dhok* wishing to set up for itself, and to become independent of its neighbours.

In Pindigheb and Fatehjang the *dhok* system has increased particularly in the last quarter of a century.

In Attock tahsil the *dhok* system has less to recommend it. The village areas are as a rule smaller. The really profitable

CHAP. I, C.
Population.
Density of population —concld.

lands are less scattered, and it is possible for a village community to have round about it and easily accessible all the best lands. An extreme instance is the villages which form the bulk of the Sarwala circle and stretch out in long strips some five or six miles in extent over the great sandy ridge which divides the Chhachh from the Sarwala. All these villages have one large *abádi* either just south of the Chhachh plain, where the land begins to rise on the north side of the ridge, and where the Grand Trunk Road is aligned, or on the line of Campbellpur on the southern side of the ridge, where water can again be tapped. In Attock, therefore, the people live in compact *abádis* which vary in characteristics with the character and custom of the people. The Pathans of the Chhachh, who are very enterprising, and are found in every part of the globe, surround their houses and courtyards with high walls, built of materials ranging from burnt brick to mud, according to the financial position of the occupants. Their houses are now better ventilated and lighted than of old. The narrow lanes are also disappearing. They house their cattle and sheep in separate buildings close to their own. The modernizing spirit of the modern Pathan is due to his coming in contact with the civilized nations of the world in the time of the Great War and in his travels. They are very strict about their purdah system, though the lower middle class welcome a helping hand from their womenfolk in their healthy agricultural outdoor pursuits.

MIGRATION.

In 1881 there was an influx of Kashmiris, due partly to the famine of that year, partly to a desire to escape from a State which had then only recently permitted its subjects to emigrate. But since then there has been nothing to attract migration from other districts. Industries exist at Wáh and Khaur : but in each case most of the labour required is found locally : and the management of both Companies have encouraged the neighbouring villager. Pawindas and others from Peshawar, Hazára, and sometimes Kashmir, pass through the district on their way to such centres of employment as Ráwalpindi, Lahore and the other cities of the plains. But they do not stay. For where the soil is fertile, the pressure of the indigenous population is already heavy : where it is insecure, there is nothing to tempt the stranger.

EMIGRATION.

Of emigration something has already been said. In a bad season cattle may be driven off to the *bet* lands in the Peshawar or Mianwali districts. Labour may be sought in the Canal Colonies. So great may be the reduction that, as in 1921, of the total remaining population 43 per cent. may be children ! But such

emigration is temporary. Somewhat more permanent is the call of Military service which attracts Pathans from Pindigheb, a few Alpiáls, and now, though not before the War, Awáns : or of the Royal Marine which started its recruiting in the Punjab, and that most promisingly, in this district. Families of small holders not infrequently send one of their members to seek employment in Peshawar, Bannu, Kohat or Rawalpindi : and at the first sign of scarcity the numbers increase. From the north-east corner of the Chhachh very large numbers of men go out as stokers on the P. and O. and British India boats, and come back shattered in health, but financially sound. Others go as hawkers to Australia, and indeed there are very few parts of the Empire which some one in the Chhachh has not visited.

CHAP. I. C.

Population.

Emigration —concld.

There are over 300 Chhachhi Pathans employed in Hong-Kong alone, mostly as darwans, some as contractors of labour, others in commercial pursuits, and a few fill posts of considerable responsibility under the Administration.

Generally so far as permanent migration goes, the district is slightly the gainer. Probably temporary emigration is always larger than the corresponding immigration.

GROWTH OF POPULATION.

The total population of the district, according to the census of 1921, comes to 512,249 against 519,273 of 1911 : showing a decrease of 7,024 equal to 1·4 per cent. This decrease continued, and the total figures in 1926 were 508,029, a further decrease of 4,220 during five years. The figures for age, sex and civil condition by religions are given in detail in Table 10 of Part B.

The following statement shows the age distribution of 10,000 persons of both sexes :—

Age statistics.

Age period.		*Male.*	*Female.*	*Total.*
Under 1 year	..	215	204	419
From 1—4	..	507	490	997
5—9	..	855	757	1,613
10—14	..	663	499	1,162
15—19	..	379	368	747
20—29	..	692	771	1,463
30—39	..	676	651	1,327
40—49	..	467	460	927
50—59	..	346	310	656
60 and over	..	372	317	689

CHAP. I, C.

Population.

Age statistics —concld.

The census showed that 43 per cent. of the total population were children or adolescent. The key to the riddle is, of course, that the census year was a year of scarcity when the able-bodied had migrated in search of work. Six hundred and eighty-nine persons per 10,000 are 60 years of age and over. The provincial average is ·659. The district is, therefore, healthy above the average.

Sex statistics.

The number of males in every 10,000 of both sexes is shown in the margin. These figures apparently show that the number of females is steadily increasing in proportion to the number of males. The sudden fall in the proportion of males in the decade 1881—1891 was really due to the excess of male emigration already noted. In 1881, too, the Attock tahsil contained a large body of foreign males attracted by the demand for labour.

Census.		In villages.	In towns.	Total.
1881	.. ..	5,395	5,558	5,403
1891	.. ..	5,219	5,418	5,229
1901	.. ..	5,206	5,457	5,219
1911	.. ..	5,215	5,364	5,258
1921	.. ..	5,139	5,620	5,172
1921..	Hindus ..	..	..	5,360
	Sikhs ..	..	..	5,065
	Muhammadans	..	..	5,162
	Christians ..	..	..	7,935
	Jains ..	..	..	4,000
	Vedic ..	..	..	5,583
	Others ..	..	..	6,087

The figures below show the number of males in every 10,000 of both sexes in each tahsil, according to the figures of the census of 1921. In both Attock and Fatehjang the males exceed the females by $2\frac{3}{4}$ per cent., but in the two southern and more insecure tahsils the numbers are either equal or women outnumber men. But these figures probably do not represent the normal state of things. The distress and scarcity, which preceded the census of 1901 and were due to the failure of the rains in 1899 and 1900, were particularly severe in Pindigheb and Tallagang. In both Attock and Fatehjang there was some crop. Elsewhere there was none. In the southern tahsils, too, population is less tied to the soil. Tenants-at-will are a large body, and are always ready at the first sign of scarcity to flock off elsewhere for work. These causes operated also in 1921. It is improbable that the proportion of males to females in fact differs much from tahsil to tahsil.

Attock	.. ..	5,334
Fatehjang	.. ..	5,256
Pindigheb	.. ..	5,040
Tallagang	.. ..	4,971

The marginal table shows the number of females to every 1,000 males under five years of age as returned in the Census of 1921. It will be seen from these figures that the proportion of girl children is satisfactory only amongst Muhammadans. But the figures are not above suspicion if compared with the death-rate of infants and the proportions between the adults of each sex. CHAP. I, C. Population. Sex statistics —concld.

All religions	967
Hindus	919
Sikhs	908
Muhammadans	972
Christians	786

The number of females to every thousand males for the important religious divisions of the people is shown below (Census 1921)—

All religions	9C1
Hindus	935
Sikhs	927
Muhammadans	964

These figures stultify the figures for infant mortality and the proportion of female children, and break the general rule that the ratio of females to males gets gradually lower as the age advances.

Table II, part B, gives the annual birth and death rates by religion and sex. The quinquennial average birth rate is 35·6 (males 19·2 and females 16·4) *per mille*, and the average death rate is 27·6 (14·2 males and 13·4 females) *per mille*. In the absence of a very large increase in the population the figures would indicate a considerable stream of emigration. The method of collecting the statistics is the usual one. In the case of villages and small towns, the births and deaths are reported by the Chowkidars at the thana, whence a fortnightly statement is rendered to the Civil Surgeon. Birth Rate.

The district is remarkably healthy, the death rate being 27·6 against a provincial average of 36·52. Death Rate.

Vital statistics in the case of Municipal towns are recorded by the Municipal Committee concerned, which sends a weekly report to the Civil Surgeon. The Civil Surgeon submits a brief report fortnightly to the Director of Public Health, Punjab. A monthly detailed statement, consolidated for the whole district, is also submitted by the Civil Surgeon to the Director of Public Health. Vital Statistics.

In spite of the prevailing aridity much of the disease is intermittent fever from which the people suffer all the year round, more especially and severely in October, November, December Diseases.

CHAP. I. C. Population. Diseases—*concld.*

and January. Roughly it may be said that 70 per cent. of deaths are due to fevers, the same being a generic term used by the Chowkidar for all diseases with fever as one of the symptoms, and including malaria and tuberculosis. As a rule the amount of fever is less in dry years than in those having heavy rainfall, but the difference is not so great as would be expected. A good rabi is usually accompanied by prevalence of fever.

In November and December, the fever is often complicated with Pneumonia. Dysentery and Diarrhœa are common enough and enlargement of the spleen towards the end of the malarial season is not uncommon. Guinea worm is prevalent wherever the people are dependent on stagnant tanks for their water supply. Eye troubles and skin diseases are common in all parts. Stone in the bladder is not very frequent except in Tallagang. Cataract cases are fairly often seen.

Influenza visited this district in the years 1918 and 1919 in severe epidemic form and was accountable for nearly 17,000 deaths.

The district is comparatively free from cholera in epidemic form. The last occasion on which cholera broke out in this form was in 1919, when deaths amounted to 2,022. Hasan Abdal is the town which is most liable to infection. It is a place of pilgrimage: there are numerous fly-attracting mulberry trees and many streams.

Small-pox to some extent is always present in the district and was particularly bad in 1912 and 1913, causing nearly 1,700 deaths each year.

Vaccination is now an established institution in the district. Re-vaccination, however, is not popular and the district is by no means immune from the occurrence of occasional epidemics.

Plague in comparatively severe epidemic form visited the district in 1924, taking toll of 3,700 lives. A milder epidemic occurred in 1919.

There has been a sadly steady increase in the incidence of tuberculosis, both of the medical and surgical type. Urban congested areas are in the main responsible.

Infant mortality.

The rate of infant mortality is comparatively high amongst girls. Female infanticide is unknown in the district, but greater attention is usually paid to the more highly prized boy infants.

CHAP. I, C.

Population.

Death Rate by Religions.

The death rates for the three years ending 1926 are given below :—

Years.	All religions.				
	Hindus.	Muhammadans.	Males.	Females.	Both sexes.
1924	22·42	37·17	36·19	35·53	36·26
1925	17·14	23·61	24·40	21·67	23·1
1926	18·63	27·81	27·28	26·73	27·11

The high mortality in 1924 was due to plague. It will be seen that the death rate was much higher amongst Muhammadans than amongst Hindus, who are largely an urban population.

BIRTH CUSTOMS.

On the birth of a son there is great and general rejoicing, and numbers of congratulations are offered. If the event has occurred in a Musalman family, the Mullah is called and utters the call for prayer (*báng* or *ázán*) in the child's ear, receiving a small present, eight annas or a rupee and some cloth. If the child is a girl, only some grain is given. A small portion of *gur* or *ajwain* (opium involucrotum) are mixed together, the mixture being called *karula* or *ghutti*. This is chewed in the mouth and softened, and a few grains of the resulting juice are placed in the mouth of the child to act as a purgative. When the babe has had a motion, the mother is permitted to suckle it. The old custom of keeping the babe from the mother for several days seems to be dying out. After a week the child's head is shaved by the *nai* or barber, the child is named by the head of the household, food and sweets are distributed, and the barber and other menials are given small presents. On the same day the mother and the child are bathed, and the woman is allowed to leave the floor for a charpoy. The ceremony is called *dhamahn*. The usages are the same on the birth of both boys and girls, but there is much greater joy on the birth of the former. There are no congratulations, no singing and no distribution of charity for a girl.

Boys are circumcised (*sunnat*) by the *nai*, up to the age of eight years, but usually after four. *Gur* and sweets are distributed, and the *nai* is paid from one rupee to ten for performing the operation.

CHAP. I, C.
Population.
Birth customs—concld.

Among Kesadhari Sikhs (who have long hair) and Sehjdhari Sikhs (who do not have long hair, but otherwise follow Sikh rites), the naming ceremony is as follows :—

About a month after birth (no time is fixed, but it is usually after the thirteenth day of birth) the child is taken by the parents to a Dharamsala. They take with them also an offering of *Karah Parshad* (*Halwah*). The Bhai in charge or some other respectable person reads out loudly to the audience a hymn appearing on the foot of the page of the Granth Sahib immediately preceding that which happens to be open. The first letter of the first verse of the hymn is the first letter of the child's name. A name following this initial letter is proposed by individuals present, put to the audience for approval and then formally announced by the reader. This ceremony is attended with rejoicings, and congratulations are received.

The custom with Hindus is that the child is named by the priest of the family, or in his absence by some other priest, according to the hour of the birth of the child. After 4, 6 or 9 months, or even any time up to five years, according to the custom of the family, the head is shaved, and some on this occasion put on the sacred thread (*janeo*). This ceremony is a time of rejoicing, and relations and friends are fed by the parents.

MARRIAGE RESTRICTIONS.

Although many of the Muhammadan tribes of the district are of Hindu origin, Muhammadan law has had such a strong effect as regards intermarriage that it has entirely abrogated the rule forbidding the marriage of relations. A Muhammadan looking for a wife always endeavours, if possible, to find one within the circle of his near relations. The bride is very commonly a first cousin. If so near a relative is not available, search is made within the tribe. Failing their own tribe, all the Muhammadans of the district will take wives from tribes of equal or lower degree but will give their daughters only to tribes of equal or higher status. All tribes will give their daughters to Sayyads (to whom they look up from religious motives), but they do so with increasing unwillingness. Marriages by men of agricultural tribes with low caste women occur sometimes, though they are looked on with disfavour. But the only general and absolute rule is that in every marriage the husband's family must be at least equal in social estimation to that of the wife, although not at all necessarily equal in wealth. All tribes, except the Pathans of Makhad *ilaqa* and Attock, repudiate any custom of bride-price, although, as will be seen, marriage everywhere involves both families in much expense.

CHAP. I, C.
Population.
Betrothal.

BETROTHAL.

Marriage is nearly always preceded by formal betrothal (*nata* or *kurmai*). Except in Attock the customs connected with betrothal are as follows :—

When the parents of the children arrange a marriage, they appoint a date upon which the boy's father provides some 10 or 12 seers of *gur*, Rs. 4 or 5 in cash, clothes for the girl and jewels according to their station, and a clove ; these things are placed on the head of the *nai* or barber, and sent to the girl's house.

The girl's father or guardian takes the *gur* inside, and the *nai* takes care of the rest. That night the girl's father gives a feast to the boy's father and others, and next morning the girl's relations assemble and feast the guests, and place the *gur* sent by the boy's father before all the relatives of the girl ; the other things,—the jewels, clothes, clove, &c.,—taken charge of by the *nai* are placed in a *thál* or open vessel, and placed before the girl's relatives.

In the Pindigheb tahsil among certain classes from Rs. 60 to Rs. 100 in cash is also placed in the *thál*. The *Mullah* is present at this time. In accordance with the *Shara Muhammadi* the promise of marriage or *Shara Jawab* is repeated three times by the girl and boy themselves if they are at full age, by their guardians for them if they are not.

One rupee, called *nishani* or the token, is always placed in the hand of the girl.

The *gur* is then divided amongst all those present, and the other articles are taken by the girl's relatives. Cash, a rupee or two according to local custom, is given to the *Mullah* and similarly a smaller amount to the *nai* or barber, and the boy's father and relatives take their leave, receiving from the girl's relatives one rupee in cash, a *pagri*, and some two sers of *gur*. The clove brought by them, coloured with *kesar* or saffron, is at the same time returned by the girl's father to the boy's father. Occasionally, too, *pagris* are given to some of those accompanying the boy's father. The girl's father then feeds his own relatives and dismisses them. The girl's female relatives sing songs of rejoicing at this time

In the Chhachh the custom is somewhat different. The boy's father goes to the girl's village in the afternoon and sits at a *hujra*, with a musician with him, who, however, is kept out of sight : then the girl's father prepares food and feeds the boy's father and those with him ; this meal is known as *khora*. After this they sit together on a mat or carpet, and the *nai*, on behalf

CHAP. I, C. Population. Betrothal—concld.

of the girl's family, places sugar in a *thál* before them. The boy's relatives then place jewels and money in this vessel. The *nai* of the girl's family has been previously instructed as to how much is to be put into the vessel, and until this amount has been put in, the *nai* continues to ask for more. When the amount is complete, the *nai* takes up the vessel and places it before the girl's relatives, who sit apart ; the girl's father then takes out as much as pleases him, and returns the *thál* to the boy's father and relatives.

Then all the girl's relatives come and join the boy's relatives, and all sit together. The *nai* then brings a cup of *sharbat* and hands it to the boy's father or the head of his family with a civil speech ; the musicians who accompanied the boy's father and who have been kept in the back-ground till now, strike up, all the women of the girl's family throw colour over the boy's relatives, and *sharbat* is handed to all. The *Mullah* is then called, the betrothal is formally entered into, and each party then goes off to its own house. *Gur* is distributed to the girl's relatives and money to the *kamins*.

On the third day after this, the boy's sisters, with a male and female relative, take vegetables, *ság*, rice and milk, and bring it to the girl's house. This the girl's relatives take, keep their guests one night and next morning dismiss them with a present of *bhochhan*, or shawl, or some cash ; this is called *milni* or *meli*. After this, if the girl's household agree, the boy's female relatives pay a visit to the girl's taking the boy with them, and clothes, consisting of a *bhochhan* or shawl, are given to each of the female relatives accompanying the boy. They remain one night and go back, the boy remaining for some days. He is then dismissed with some clothes and a ring, and is accompanied by the girl's female relatives, who also each receive a *bhochhan* from the boy's father or guardian. This is known as "*pair-gala.*" After this, up to the time of the wedding, at each I'd presents of jewels, clothes, *gur*, rice, and so on, are made to the girl's family by the boy's family.

Betrothal in this district, usually takes place, for the boy between the ages of 10 and 15, and for the girl before her twelfth year.

MARRIAGE.

After fixing the date, the parents of both parties despatch small presents of *gur*, &c., to their more distant relatives and friends by the hands of the *nai*, who receives small presents of cash, two annas or four annas, or of grain. Fifteen days before the wedding, the women of the family come together and sing,

CHAP. I, C.
Population.
Marriage —*contd.*

which they do nightly thereafter until the wedding day. Seven days, or in some cases four days, before the wedding, except among the Pathans, *gulgule* or *mayan*, a sort of biscuit, made of *ata* and *gur* cooked in oil, is distributed ; twenty-five of these are placed before the bride and the rest are kept in reserve. When the bridegroom comes, two of these are given to each of the special intimates, "*sabahle,*" and the rest are then divided amongst the guests. This custom is not universal. At the same time that these cakes are prepared, the *gana* is tied round the bridegroom's right wrist. This is a black string of wool with an iron ring with some *sarson*, &c., tied on to it. This is known as *binda.* The custom of *binda* follows that of *mayan.*

The day before the wedding, or, if the bridegroom lives near the bride, on the morning of the wedding, the women of the bridegroom's family go with him about 4 P.M. to fill their *gharah* with water, taking musicians with them singing as they go; they fill one *gharah* and a small vessel with water and return to the house, and placing the bridegroom on the *chauki*, or low stool, they mix oil, flour, turmeric (*haldi*), &c., with curds, and therewith they wash the boy's head. Each woman dips her finger five times in the mixture and places it on the lad's head ; then the *nai* shampoos and bathes him and the women throw small sums into the vessel for the *nai* and musicians, who divide it. After bathing him, the *nai* places water in the bridegroom's hand, who scatters it to the four cardinal points, said to be indicative of a desire to include all in happiness similar to his own ; then some embers are placed in a small earthenware cup, and some *harmal* seeds are thrown into them, which emit an odour : this is placed before the boy to avert the evil eye ; the boy then kicks this over and gets up off his chair, and, putting on a black blanket, goes and sits with his friends and eats confectionery with them. Then the women of the family colour the bride and bridegroom's feet and hands with cochineal (*mehndi*), and their own hands also. The order of these ceremonies is sometimes altered. The bridegroom's friends assemble a day or two before the wedding and are fed by his family ; then, when the bridegroom is ready to start for the bride's house, a wreath is tied round his forehead, of tinsel and flowers, and he is dressed in his best, and the *nai* gets his old clothes. The bridegroom is then addressed as Maharáj, and is made much of, and clothes are distributed also to near relatives, who then wear them, and these in their turn make presents to the bridegroom and his family in cash of sums corresponding to their station in life and small money presents are made to the *kamins*.

CHAP. I, C. Population. Marriage —*contd.*

The bridegroom then mounts his horse, salutes his near female relatives, each of whom gives him some coin. His sister offers grain to his horse, and holds his halter. He makes her a present, and the marriage procession then starts for the bride's house. Any shrine passed in the way is saluted and an offering made.

The girl is treated much in the same way up to the day of the wedding, and is then placed in retirement (*parda*), and other girls of her own age assemble round her. When the bridegroom's procession arrives, tent pegging, &c., goes on in front of the house. The women of the bride's house turn out and throw Persian lilac seeds at the bridegroom's party and abuse them; the bridegroom's party then presents *gur* to them, and the whole party adjourn to some large building arranged for the purpose, and the *nai* of the bride's family gives a cup of milk to the bridegroom who gives him two annas. Then the potter brings some *sharbat* and gives it to the bridegroom and guests, and he gets two annas. One rupee is sent to the girl's house; and the bride's family feast the guests who accompany the bridegroom, then the guests of their own connexion, and then *fakirs*, beggars, &c.

Then at night the women take the bridegroom to a place by himself, where lights are set out, and sing obscene songs. Later the women take the boy out with them and perambulate the village singing similar songs. In the morning the boy is brought to the house of the girl's father, and the carpenter knocks in five pegs into the door, which the bridegroom takes out, giving the *tarkhan* a small money present of from one to six annas. Then the bride and bridegroom are bathed and dressed.

After that, the friends of both parties assemble in a suitable place, and the marriage contract, or *nikah*, is performed by the *Mullah*. The girl's friends answer for her, and the bridegroom answers for himself, and the ceremony is witnessed by four witnesses and the dower fixed. The *Mullah* gets from one rupee four annas to five rupees for performing the ceremony. Then the bridegroom is taken into the bride's house. Presents are made to the bride at this time, and presents are given by the bridegroom to the *kamins* of the bride's house, and the bride is then placed in a litter and sent off with her husband.

In Chhachh the expenses of the wedding are all borne by the bridegroom's family, and not by that of the bride.

When the bride reaches her husband's door, the litter is placed on the ground in front of it, and the women of the family

abuse her, and the bridegroom's mother, after moving the water, she has brought, round the bride's head three times, tries to drink it, which the bridegroom does not permit her to do ; the litter is then taken into the house, and the *nai's* wife remains with the girl.

CHAP. I, C. Population. Marriage —contd.

In the morning the *kahárs* and *kamins*, who come for the litter, get presents and are dismissed. In the afternoon the threads on the boy's and girl's wrists are removed, each by the other.

This is a description of the marriage of an ordinary land-holding Musalman zamindar in this district. There are slight differences observable in different parts of the district, most of which have, however, been noted.

In Tallagang about a week before the ceremony the bridegroom is anointed with oil, and the *gána* is then fastened on his right arm. From that day he keeps constantly with him two or three friends, called *sabala*, who get their food in his house. A few days before the *barát* starts for the bride's house the more intimate friends of the bridegroom arrive, the other invited guests dropping in later when all are assembled, and the boy's father gives a great feast, generally including rice and meat, and costing from Rs. 50 to Rs. 500. When the *barát* reaches the bride's village, the bride's father gives a feast, which costs from Rs. 90 to Rs. 800. This is followed by *béri ghori*, which practically consists of making images in flour of the boy's relatives and then extorting a fee by threatening to abuse them. This ceremony is performed by the barber's wife. Then succeeds a promenade of the bridegroom round the village attended by pipes and drums, and women and *mirásis* singing in antiphonal measures, which goes on till the *sargi* or four o'clock in the morning. While the *nikah* is being read, the girl is kept apart in *parda*, two witnesses being sent to her to enquire to whom she will give authority to consent to her marriage on her behalf. This is a mere pretence, as the girl holds her tongue, and her relations answer for her that she gives the *wak* or power-of-attorney to so and so. The man in question is called, accepts the power-of-attorney, and proceeds to settle the dower with the bridegroom. This is first put at an extravagant rate and eventually beaten down to a reasonable one. The rate varies from Rs. 20 to Rs. 100 or even more, generally with the addition of a gold mohur, but is usually Rs. 32, supposed to represent the 500 copper coins and gold mohur allowed by Muhammadan law. After the marriage ceremony the bride's father exhibits to those present the articles given by him to his daughter as dowry (*jahéz* or *dáj*), the *mirási* meanwhile announcing them (*hukai*).

CHAP. I, C.

Population.

Marriage —*contd.*

The bride's clothes are then formally changed, this being the public sign that the marriage ceremony has been completed, and the *barát* party, now taking the bride with them, return to the bridegroom's house. On the seventh day, when the *gána* thread is untied, the bride is taken home by the parents, the bridegroom following a few days later, and remaining in his father-in-law's house for a week. He then goes home and after some days more the bride is brought away by some of his relations, and takes up her abode finally with her husband. If the parties are not of age, the *barát* is sometimes deferred until they grow up, but this is very rarely done.

The non-religious portions of Hindu marriage ceremonies are in a general way very similar to those of the Musalmans. The essential and binding part of the marriage ceremony, which, in the case of Muhammadans, is the *nikah*, is with Hindus the *kania-dan*, or transfer of the girl to the boy's family. The girl's father puts her hand into the boy's, their clothes are tied together, and they walk seven times round the sacred fire (*hóm*), the Brahman reciting certain *slókas* from the *shástras* meanwhile. The whole ceremony of circum-ambulating the sacred fire is called *láwán phere*. The *barát* stays longer than among Muhammadans. The usual time is four nights, the company being fed by the girl's family. An attempt made in 1905 by the Deputy Commissioner to reduce the time to two nights came to nothing. The *jahéz* or dowry also is usually more elaborate, consisting of clothes, cash or ornaments, metal vessels, according to means ; a lacquered bed-stead and a lacquered chair ; and the well-to-do sometimes give cattle or horses as well.

There is little restriction on the season for marriage. For obvious reasons Muhammadans avoid the month of Ramzan, nor will they marry on the I'ds, during the first 13 days of Safar, or on the 3rd, 13th, 23rd, 8th, 18th or 28th days of other months. Hindus do not marry in the months of Chet, Katak and Poh, nor during the *Sanghat*, or inauspicious period of about a year, which recurs every twelve years or so.

There is no fixed age for marriage. Among Muhammadans the contracting parties are usually adults, and the wife goes to live with her husband at once. With the Hindus the marriage is at about twelve for girls and eighteen for men. Marriage used generally to take place at the age of from 7 to 10 years, but now child-marriage is fashionable only with those who cling to old customs and the *shástras*. The girl remains with her parents till the *mukhláwa* ceremony.

CHAP. I, C.

Population.

Marriage—*concld.*

Among Hindus the wife enters the caste and *gót* of her husband on marriage. Apparently Muhammadan women always belong to the tribe in which they were born. Practically the whole adult population marries. For Hindus marriage is an obligatory ceremony. A few Muhammadan women are vowed to celibacy (*musallanashin*) and a few men are unmarried, but the number of both is small. Among Hindus and the principal Muhammadan families widow re-marriage is not practised, but in the great mass of the agricultural population no stigma attaches to marriage with a widow, and a woman, if not too old, will always remarry. Of women of all ages above 30 among Hindus 82 per cent. are widows. Among Muhammadans the corresponding percentage is only 54.

Polygamy is a matter of expense. Hindus as a rule are monogamous. A Muhammadan has more than one wife when he can afford it. The ordinary zamindar with his small holding or poor land has to content himself with one wife ; while his richer brother may have two. More than two wives are uncommon and in general polygamy is confined to the principal Muhammadan families. Divorce is unknown among the Hindus, but exists in the usual form among Muhammadans. It is resorted to with great reluctance, and the most binding oath is the *talák* or oath of divorce. Instances are not infrequent of an oath being given in genuine error : as when a zamindar, honestly believing that A perpetrated such and such a deed, swears, "May I be divorced if *A* did not do so and so." If it subsequently transpires that there is the least error in his statement, then on pain of excommunication, he must not co-habit with his wife till he has again been formally married to her. Reference in such cases is usually made to the *Mullah*, and he. quick to lose no opportunity of fees, invariably decides according to the strict letter of the law. Polyandry is unknown in any form and does not appear ever to have been practised. *Pagwand* is the universal rule of inheritance, and agnatic descent is the basis of the customs of all tribes. None of the tribes of the district have ever practised female infanticide. Only the leading families have any difficulty in getting their daughters married, and the peasant proprietor finds a great deal of work for the young women of his family to do.

LANGUAGE.

The almost universal language of the district is Panjabi. Pushtu is spoken in the Makhad *iláqa* of the Pindigheb Tahsil, lying alongside the Indus between Kálabagh and Khushalgarh and in the northern portion of the Attock Tahsil, the Chhachh *iláqa.* The inhabitants of the Makhad *iláqa* are Sagri Pathans,

CHAP. I, C.
Population.
Language—concld.

and speak the Pashtu of Kohat ; those of the Chhachh *iláqa* are a miscellaneous body allied to the Yusafzai Pathans of the Peshawar District. Many of the Makhad Pathans speak the Punjabi of the surrounding country and a very broken Urdu, but Pushtu is the tongue they use among themselves. Urdu is confined to Attock and Campbellpur, and a few of the better educated, and to the temporary residents whose homes are down country. South of the Kala Chitta hardly a word of Urdu is spoken, even the prominent *maliks* constantly employing their native Punjabi. The Punjabi spoken is quite different from the *Pothwári* dialect of the adjoining tahsils of Rawalpindi and Jhelum, and resembles more the language spoken in the western Salt Range, and in the Thal beyond. Dr. Grierson calls it Lahnda and writes "although influenced by the dominant Punjabi spoken in the Province it is much more nearly connected with Sindhi and Kashmiri than with that language. So much is this the case that difficult words in the Kashmir Chronicles have actually been explained by a reference to Mr. O'Brien's Multani Glossary."

The dialect spoken belongs to the group of dialects which has been called Western Punjabi, of which Rev. Mr. Bomford has published a grammar and Rev. Dr. Luke a dictionary. A "Grammar and Dictionary of Western Punjabi, as spoken in the Shahpur District" was published in 1898 by Mr. (later Sir James) J. Wilson, I.C.S., when Settlement Officer and Deputy Commissioner of that district, and this deals fully with the language of an adjoining tract, whose dialects are not very different from those of the district.

There are, of course, differences in dialects within the district among the Punjabi-speaking people. The speech of Tallagang is different from that of the Gheb, which again differs from the dialect of the Attock Sarwála. The dialect spoken in the Soan valley is known by the distinctive name of Sawain, the speech of Khatries throughout the district is quite distinct from the zamindari tongue, and Gujars, who keep to themselves and are disliked by their neighbours, speak a dialect of their own which seems to be more Hindi than Punjabi.

But in spite of these differences every resident of the district is intelligible to every other. The Pathans all know the ordinary Punjabi and the Punjabi dialects have the common characteristics of pronominal suffixes, a strong passive form in i, and a future in s, and all merge gradually the one into the other.

DISTRIBUTION OF LAND-OWNING TRIBES BY TAHSILS.

In the whole tract south of the Kala Chitta and to a less degree north of it, the great land-owning tribes are arranged in

solid blocks, the limits of which are indicated on the tribal map attached to Volume B. CHAP. I, C. Population.

There is very little mixing of tribes in any one tract. The Awáns occupy practically the whole of Tallágang Tahsil, where they comprise 83 per cent. of the total population and 72 per cent. of the number of owners and shareholders in land. The following table shows how land held in private right is divided among the various tribes in Tallagang in 1928-29. The figures in brackets represent the figures on the first edition (1907) :— Tallagang Tahsil.

Detail of main tribes.	Percentage of area cultivated.		Percentage of revenue assessment of revised settlement paid.	
Hindus and Sikhs	3	(3)	3	(3)
Sayyad	4	(3)	5	(3)
Janjua	2	(3)	2	(2·75)
Awan	82	(81.5)	80	(77)
Gujar Bhatti and Jat	5	(4)	6	(7)
Others	4	(5.5)	4	(5)

In Tahsil Pindigheb the tribal distribution is simple. The whole of the south-east and centre is held by the Jodhra tribe. Along the hills above the Indus river are the Sagri Pathans of Makhad. A solid Awán tract intervenes between the Jodhras and the Pathans and runs from the south to the north of the tahsil. Last the Khattar tribe holds the north-east of the tahsil along the Attock border. These four tribes own practically the whole of Pindigheb Tahsil, and their present boundaries are the result of violent fighting during the break-up of the Moghal and Sikh rules. The following statement shows the percentage of cultivated area owned, and of land revenue paid by each tribe :— Pindigheb Tahsil.

Tribe.	Percentage of cultivated area owned.		Percentage of land revenue paid.	
Jodhras	30	(31)	32	(34)
Awan	32	(25)	30	(24)
Khattar	17	(18)	14	(18)
Pathan	10	(8)	7	(5)
Rajput Chohan	3	(3)	3	(2)
Sayyad	3	(2)	3	(2)
Other Musalmans	2	(9)	4	(9)
Hindus	3	(4)	7	(6)
Total	100	(100)	100	(100)

CHAP. I, C.
Population.

The increasing prosperity of the Awáns, due to Military service, is most marked.

Fatehjang Tahsil.

Ownership is less simple in Fatehjang than in Pindigheb, and indeed in the extreme east of the Gheb Circle and throughout the Sil Soan circle the ownership is a good deal mixed. The principal tribes together with the percentages of the cultivated area owned, and of the land revenue paid, are shown in the table below :—

Tribes.	Percentage of cultivated area.		Percentage of land revenue.	
Gheba	36	(34)	21	(19)
Khattar	20	(21)	18	(17)
Miscellaneous Rajputs	12	(12)	16	(14)
Awan	8	(10)	11	(15)
Alpial	6	(10)	10	(17)
Gujar	4	(4)	5	(6)
Sayyad	1	(2)	2	(3)
Khatri	..	(3)	..	(4)
Other Musalmans	8	(3)	10	(4)
Other Hindus	5	(1)	7	(1)
Total ..	100	(100)	100	(100)

The Khattars hold the whole of the Nala circle on the north and the east of the Gheb circle in the centre of the tahsil, forming part of the old Khattar *ilaqa* which extends from Fatehjang to Hassan Abdal in Attock and along the Kala Chitta from the Indus river to the Margalla pass in Rawalpindi. The Ghebas own the whole of the west and south of the Gheb circle up to the Pindigheb border which marks the separation of the Ghebas and the Jodhras. The Alpiáls are in the Sil Soan circle alone, and though mixed with Awáns and other tribes, are far the largest owners in the circle. The extreme east of the Gheb circle on the Ráwalpindi boundary is held by miscellaneous Rajput tribes and belongs ethnologically to the Rawalpindi Tahsil. It will be noticed that the Ghebas and Khattars, who own large *barani* tracts, pay much less revenue in proportion to their holdings than any other tribes.

Ownership is more complicated still in Attock Tahsil. The Chhachh is almost wholly Pathán, though Awáns own a good deal of land and pay 9 per cent. of the revenue. The Sarwala circle is divided between Awáns, who own a third of it, Khattars, owning a fourth, and Gujars and Shaikhs. Patháns preponderate in the Nala circle, followed in order of importance by Gujars, Khattars and Awáns. Roughly Khattars lie all along the Kala Chitta. Patháns hold the Chhachh and the Nala estates along the Haro. Awáns inhabit the centre of the Sarwala, the west of the Nala circle, the neighbourhood of Shamsabad in the Chhachh, and are scattered through the rest of the tahsil. Gujars and Shaikhs are settled along the boundary of the Chhachh and Sarwála circles and the former are strong in the centre and east of the Nala circle. CHAP. I, C. Population. Attock Tehsil.

Such is the tribal picture of each tahsil.

RELATIVE IMPORTANCE OF PRINCIPAL TRIBES.

Before proceeding to discuss the tribes individually, it will be convenient to focus the tribal picture of the district as a whole : with reference to their importance as agriculturists.

Awáns are by far the most important tribe in the district and predominate in Tallagang. They are also met with in the greater part of Jandal as well as in the south of Makhad and in the west of the Sil circle of Pindigheb. In Attock we find them in both the assessment circles of Sarwala and Nala. The premier Awán in Tallagang is Khan Sahib Mohammad Khan of Tamman, but the leadership of the tribe is ascribed to Khan Bahadur Malik Muhammad Amin Khan of Shamasabad in the Attock Tahsil. Awáns.

Rájpúts follow Awáns, and include the Rajput Jodhras of Pindigheb, Dandi, Kamrial and the Maliks of Khunda who hold lands in the Sil circle of the Pindigheb tahsil, as well as the Alpiál Rájpúts of the Soan circle of Fatehjang. The chief family of the Alpils are the descendants of Chowdhri Sher Khan of Chakri. The head of the Rájpút Jodhras, and of the Rájpúts generally, is Khan Bahadur Nawab Malik Ghulam Muhammad Khan of Pindigheb, a noble gentleman of the old school. Rájpúts.

The Khattar tribe comes next. Tribally, the senior branch is that of the late Sardar Dost Muhammad Khan of the Fatehjang tahsil. Politically, the most important family at present is the branch at Wah in the Attock tahsil. The tribe lies along and across the Kala Chitta hills in the tahsils of Attock, Fatehjang and Pindigheb. Khattars.

CHAP. I, C.

Population.

Mughals.

The Mughal Rewals who are generally known as *Ghebas* have an importance exceeding their numerical strength. They are excellent horsemen and claim Mughal origin. They are found in the centre of the Fatehjang tahsil, with Lieutenant Sardar Muhammad Nawaz Khan, Sardar of Kot Fateh Khan, head of their tribe, and indeed of the gentlemen of the district, a district happily rich in families of gentle descent and gentle manners.

Patháns.

Patháns fall into 2 sub-divisions, the Chhachhi Patháns who, with certain brilliant individual exceptions, miserably failed to respond to the call of War, and the Sagri Patháns of the Makhad ilaqa, who did well.

Gujars.

Gujars are only found in the Attock and Fatehjang tahsils.

PERCENTAGE OF POPULATION AND CULTIVATED AREA BY TRIBES.

The percentage of the total population and of the cultivated area, held by the various tribes will appear from the following table :—

Tribe.	Percentage of cultivated area.	Percentage of popultaion. (1921).
Awán	37	34
Rájpút	15	6
Khattar	11	1
Pathán	9	8
Mughal	9	1
Gujar	3	2
Other Agriculturists	8	13
Non-Agriculturists	4	35
Shamilat, etc. — — —	3	103

No attempt has been made at comparison of these figures with those recorded in the Gazetteer of 1907. In the latter there were clearly grave misprints, *e.g.*, Pathans were shown as owning 1·7 of the cultivated area, and paying 49 per cent. of the land revenue.

TRIBES GAZETTED UNDER LAND ALIENATION ACT.

The tribes gazetted under the Land Alienation Act are Awán, Biloch, Gakhar, Gujar, Jat, Jodhra, Khattar, Koreshi, Maliár, Mughal, Pathán.

Rájpút	Hun.	Rájpút	Johad.
,,	Janjua.	,,	Chib.
,,	Tuh.	,,	Mangeal.
,,	Bhatti.	,,	Choban.
,,	Hattar.	,,	Adhial.
,,	Chanial.	,,	Kurar.
,,	Dhamial	,,	Jhottial.
,,	Mitwal.	,,	Jodhara.
,,	Bhakral.	,,	Bhatti Mehra.
,,	Alpiál.	,,	,, Kanjal.
,,	Kahut.	,,	,, Jangle.
,,	Khingar.	,,	,, Badhuer.

Sayyad, Bhatti, Janjua, Jodh, Kahut, Mair and Manhás, Bhatti Shaikh, Sadiqi Shaikh, and Mohiál Brahmins.

PRINCIPAL TRIBES IN ORDER OF STANDING.

Social standing in the district is a somewhat complicated matter. A certain halo invests a Sayyad: as also any saint of any caste who has established a reputation for holiness. Koreshis command respect though less than that accorded to a Sayyad. The Jodhra Rájpúts in Pindigheb command special respect: as do the leading Khattar and Awán families. Among the peasants the Awán has the better name. An Awán will accept a Khattar bride: but will not give his daughter to a Khattar family. A Khattar may think himself better than an Alpiál but the Alpiál would not agree. Ghebas and Khattars are of similar position. Patháns are recognised as well-born, and marry only with Patháns or Sayyads.

Jats, Gujars and Maliars occupy the lower strata in agricultural society, and rank in the order in which they are given. After them come the *kamins* (the menial and artisan classes). Sunáras are socially the highest, and Lohárs are slightly superior to the Tarkháns, but the names are often used alternatively, the same man being both a carpenter and a blacksmith. Kumhárs, Julahas, Nais, Telís, Machhis, Mallahs, Dhobis, Mirasis, Mochis, Mussalies are given in the order of their social importance.

Hindus are principally Brahmans, Muhials, Khatris and Aroras and rank in that order.

CHAP. I, C.

Population.

Notes on the various tribes follow.

AWÁNS.

Location of Awáns.

Numerically of all tribes in the district, the Awáns, who make up almost a third of the population, are far the most important. The Awán country centres round the western Salt Range, extends into the adjoining portions of Miánwali, Shahpur and Jhelum districts, and includes Kálábágh on the west bank of the Indus, the seat of the head of all the Awáns. In this district they appear in every tahsil. They own practically the whole of Tallagang, the centre of Pindigheb Tahsil in a strip from the Soan to the Kala Chitta, about a quarter of the total tahsil area, ten per cent. of Fatehjang including land in all circles, but especially in the Sil Soan circle, and almost a fifth of Attock Tahsil where they divide the Chhachh with Patháns, the Sarwala with Khattars, and the Nala circle with Patháns, Gujars and Khattars. Tallagang Tahsil and the central tract of Pindigheb are so essentially Awán country as to be commonly known as the Awánkári. Where they do not appear as owners Awáns are found as tenants, and in much of the district cultivating occupancy is almost solely Awán. They are the backbone of cultivation everywhere south of the Kala Chitta, and even in Attock Tahsil they yield only to Patháns in importance as agriculturists. In Fatehjang and Pindigheb they cultivate at least two-thirds of the total area, while in Tallagang the proportion cannot be less than 90 per cent. No statistics are available to show what proportion of the area of the district is cultivated by Awáns, but there is little doubt that every other man at the plough tail is an Awán. In the whole district they own 36·7 per cent. of the cultivated area and pay 30 per cent. of the revenue. In the adjoining district of Ráwalpindi also they are very numerous both as owners and as tenants.

Origin of Awáns.

The origin of the Awáns is one of the battle-grounds of Punjab ethnology. Their own story is that they are of Arab origin, being descended from one Kutb Shah of Ghazni, who ruled at Herát, but joined Mahmúd Ghaznavi in his invasion of India, and received from him the name of Awán or "helper." Kutb Shah, according to the Awán account, was descended from Ali, the son-in-law of the Prophet, but by a wife other than Fatima, and the Awáns have been Musalmáns from the beginning. The original Settlement was in the neighbourhood of Pesháwar, but Kutb Shah's sons spread over the country to the east and south. Gauhar Shah or Gorrara settled near Sakesar; Kalan Shah, or Kalgan, at Dhanhot (Kálábágh): Chohán colonised the hills near the Indus;

Khokhar, or Muhammad Shah, went on to the country about the Chenáb; and Tori and Jhajh remained in the trans-border country, where their descendants are said still to live in Tiráh and elsewhere. All acknowledged the chief of Kálábágh as the head of the tribe.

CHAP. I, C.

Population.

Awáns—*contd.*

Cunningham's theory.

General Cunningham's theory (Archæological Reports, II 17 ff) identifies them with the Juds, whom Bábar in his memoirs mentions as being descended from the same father as the Janjuas, with whom they divided the Salt Range. They took their name from the old name of Mount Sakesar (Jud), which is still the tribal centre of the Awáns, and had from old times been the rulers and inhabitants of the western Salt Range. Cunningham would make both Janjuas and Awáns " Anuwán " or descendants of Anu. He thinks it probable that they held the plateaus which lie north of the Salt Range, at the time of the Indo-Scythian invasion which drove them southward to take refuge in the mountains. Bábar mentions that younger brothers and sons among the Juds were called, "Malik," a title still used by the headmen of the Awáns.

This theory does not accord with the present distribution of the tribe, and is contradicted by the fact that in Bábar's time the Janjuas ruled not only the Salt Range but the country to the north of it. Bábar describes the Janjuas as owning at least the neighbourhood of the Soan, and the western Salt Range was conquered by the Awáns under leaders whose names are still well remembered. It is also very improbable that the Janjuas and the Awáns were one race within historical times.

Brandreth theory.

Mr. Brandreth gave a third account of the Awáns. He was of opinion that they were descended from " the Bactrian Greeks driven south from Balkh by Tartar hordes, and turning from Herát to India, " and that entering the Punjab not more than 300 years ago as a conquering army under leaders of their own, they dispossessed the Jajua Rájpúts of the Salt Range country. He gives no reasons, and this theory, which is merely a conjecture is almost certainly wrong. The Awáns have been almost the sole occupants of the western Salt Range for the last 600 years. In addition it is very doubtful whether any Greeks settled in Bactria at all, and lastly 300 years takes us back only to the end of Akbar's reign, when, as the Ain-i-Akbari shows, the Awáns inhabited and gave their name to a tract, which may without hesitation be identified with the present Awankari.

Modern view.

Mr. Thomson, in his Jhelum Settlement Report, considered the whole question, and wrote as follows :—

" In such a conflict of authorities it is difficult to decide. The tribal tradition is probably a fable slightly connected with

CHAP. I. C.
Population.
Awáns—contd.

fact. Arabian ancestry is a favourite fiction, and Mahmúd of Ghazni is the common *deus ex machina* to save the confession of a primitive idolatry. On the other hand General Cunningham's theory seems incredible. It is supported by little or no evidence. It is almost unheard of for undoubted Lunar Rájpúts, of high pedigree to deny their origin, and to be joined in the denial by all their neighbours. Similarly the fancies about Bactrian Greeks are a mere surmise, and a very recent arrival of the Awáns is contradicted by historical evidence. The most probable account seems to be that the Awáns are a Jat race who came through the passes west of Dera Ismáil Khán, and spread northward to the country round Sakesar. Here they were found by Mahmúd of Ghazní, and by him converted to Islám. This version is apparently in accordance with the less adulterated traditions of Dera Ismáil Khán. It also agrees with those traditions recorded by Mr. Griffin, which point to a former Hinduism. It is, moreover, in agreement with the common speech of the country which always classes the Awans as *Zamindar* or low born men in contradistinction to the *Sahu* or gentle tribes of Janjuas and Gakhars. Out of their own peculiar territory the Awáns are frequently set down as Jats of the Awán *got* in the records of the first Regular Settlement. This is good evidence of the popular opinion. In Pesháwar they are always reckoned as Hindkis."

These views were noticed with approval by Sir Denzil Ibbetson, Punjab Census Report, 1881, paragraph 405, and in the Shahpur Gazetteer, Mr. Wilson wrote that the Awáns " so far as language, customs and physique go, are an indigenous Punjab tribe." There can be little doubt that the Awáns were originally Hindus. The Hindu character of some of the names of Kutb Shah's sons will be noticed. Some explain it by saying that Choháns and Khokhars were named after the tribes of their mothers: others that the Awáns were converted to Hinduism, but after some time were brought back to Islam, when 1 maund 25 seers of sacred thread was collected from their persons; but these explanations fail to satisfy. The Kálábágh family genealogical tree, which traces their descent from Kutb Shah, contains serveral Hindu names such as Rai Harkaran, immediately below the name of Kutb Shah, and in places, Awáns still employ Hindu Brahmans as family priests.

The Awáns have always been less conquerors than settlers. Unlike the Gakkhars, Janjuas, Jodhras, Ghebas, Khattars and other tribes who retained in subjection and cultivating occupancy the population of the country they conquered, the Awáns either dispossessed or absorbed the original inhabitants. They not only

ruled but occupied. It is interesting to observe the absence of Jats and Gujars in the purely Awán tracts.

When the Awáns in their turn were overpowered in Ráwalpindi District, and in Attock, Fatehjang and Pindigheb Tahsils, they settled down as tenants under their conquerors. It is easy to make conjectures, but their history and distribution alike encourage the belief that they are indigenous inhabitants of the western half of the tract now divided between the Attock and Rawalpindi Districts. Their early home may have been in Kahúta, Rawalpindi and Fatehjang. Partly under pressure from the Gakkhars who descended from the hills on the north, partly compelled by ambition and natural expansion, they drove the Janjuas out of Tallagang and the Salt Range, and spread over into Miánwáli and Shahpur. Wherever they went they settled and absorbed or expelled the resident population. Wherever a new wave of invasion poured over them, they were content to remain in a subordinate position in the tract they had once ruled. That they are of Rájpút origin is improbable, but, on the other hand, they cannot have been pure Jats. Bábar says Jats and Gujars occupied hills and valleys throughout what is now Attock District, but Awán physique is something different from the physique of Jats and Gujars, and tribal character is not less widely distinguished. They may be a third tribe, neither Rájpút nor Jat, indigenous to the Upper Sind Sagar Doab who both ruled and cultivated a country which had room for Jats and Gujars also in subjection to the Awáns. Mr. Thomson's identification of them with Jats and his description of them as low born men is almost certainly wrong. It is beyond question that they found the Janjuas in possession of the western Salt Range and ejected them, and throughout this and the surrounding districts they rank high in the social scale.

The Awáns are divided into numerous clans (called *múhi*) which take their name from the common ancestor. Thus the Mumnáls are the descendants of Moman, the Saghráls descend from Saghar, the Shiáls from Shehan, and so on. As regards Gangs and Munds, who are generally reckoned as Awáns, there is some reason to doubt whether they really belong to the tribe ; the leaders amongst those who are admittedly Awans do not usually admit it, and it is quite possible that, surrounded as they are by Awáns on all sides, they would gradually come to be regarded as members of the tribe even if they were not so in reality ; but it is, of course, also possible that they may be Awáns, though not descended from the latest common ancestor of the other clans. The principal branches of the tribe found in the district are Kutbshahi, Sadkál,

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Bugdiál, Chajji, Saidan, Parbal, Ballial. Trer Awáns inhabit the south-west corner of the Attock Nala, and a few families are found in the Tallagang Tahsil. They do not share in the good character borne by the rest of the tribe, so much so that the question of gazetting them as a criminal tribe has been seriously discussed. Khattars claim a common origin with the Awáns, but the Awáns repudiate the connexion. Awáns are a very self-contained tribe, and will not as a rule give their daughters in marriage to other tribes. The small proprietor always marries his daughter to an Awán. The big families take Gheba and other women freely, but are reluctant to give their daughters in marriage to any but Awáns, though there seem to be some instances of marriages with leading men of the Chakwál tribes. It is said that the Kálábágh Malik refused to betroth his daughter to Sardar Muhammad Ali, of Kot, though his granddaughter was later betrothed to Sardar Muhammad Nawáz Khán of Kot in 1907. In some families, at least, prominent Awáns take to wife women of low tribes (usually having an Awán wife also), and this practice does not seem to meet with as much disapproval as in most other tribes of equal social standing; but ordinarily Awán wives only are taken. Certain families marry with certain other families only, and in all cases marriage is generally, but not necessarily, within the *Múhí*.

In the Gazetteer of 1907 the Awáns were written of as follows :—

" Awáns are less prosperous in Fatehjang and especially in Pindigheb than in the other two tahsils. They are in their way good, hard-working cultivators, their genius lying in the direction of elaborate embankments, to make the most of the scanty rainfall, rather than in attention to small details. Their fields have often a very slovenly appearance, but this is more apparent than real. In Fatehjang they are nearly always small owners self-cultivating, hard-working and quarrelsome. In Pindigheb holdings are rather small among them, and there are no large owners. Drought and hard times have told upon them so that they are much in debt and have alienated a great deal of their land. Generally tall, broad-shouldered, well grown men with plenty of spirit, they should make fine soldiers, but more than any other tribe in the district they dislike leaving their homes, and there are comparatively few of them in the army. They are a curious instance of a peasant tribe with aristocratic traditions and a history of conquest and dominion. Their manners are frank and pleasing, but everywhere they are headstrong and irascible to an unusual degree. Their characteristic failings are

CHAP. I, C.
Population.
Awáns—*contd.*

vindictiveness and a proneness to keep alive old feuds. In Tallagang these characteristics have led to an undefined but well-understood factious organisation centering round the Maliks of Láwa. The greater part of the Tahsil is split into two parties, to one or other of which almost every headman belongs. The bonds of connection are not drawn very close, but every member of a party can always look for countenance and general support from the other members. In many villages it means only this that a member of the faction who has to put up in the village will stop with the lambardar of the same faction, but elsewhere the rivalry is very bitter. Intermarriage goes on between the two factions, but it is curious to note among all tribes how little effect intermarriage has on the long established feuds. In the old times a son naturally belonged to the party of his father, but latterly some of the younger men have chosen for themselves, and gone over to the enemy, generally on account of marriage connections with the other factions, but this is not held to excuse the deserter, and great animosity has resulted. In Jhelum district these differences are settled in the light of day with 6-feet staves, but the Tallagang men prefer secret murders, or the more peaceful methods of false charges and civil suits. False witness whenever needed is an implied condition of tenancies in some parts. Open rioting is rare. The Awáns are not addicted to thieving, and with all their faults are a very fine peasantry."

In the Gazeteer of 1907 the state of party faction was described as follows :—

In Tallagang the factions have their headquarters at Láwa, and are known by the names of Ujjal Khán and Khán Beg.

The latter was the father of Muhammad Khán, Ilákádár, who is now a member of Ujjal Khán's faction, the rest of the family is still on the other side : each party has its adherents in every important village as follows :—

Village.	Ujjal Khán's party.	Khán Beg's party.
Láwa	Ujjal Khán .. Muhammad Khán .. Sher Muhammad ..	Sultán Mubáriz. Aziz Khán. Ahmad Khán. Yáran Khán. Ahmad Yár. Mulkhá, Pattidár.
Danda Shah Biláwal ..	Budha Khán. Wiláyat Sháh.	
Dhurnal	Sháh Nawáz (doubtful) .. Muhammad Khán "Bhauka."	The other lambardars.

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Population.

Awáns—contd.

Village.	Ujjal Khán's party.	Khán Beg's party.
Thoa Mahram Khán ..	Lál Khán, dismissed lambardár.	Ahmad Yár. Allah Yár. Muhammad Khán, lambardár.
Nilá	Jahán Khán ..	Muhammad Sháh.
Pachnánd	Jahán Khán ..	The other lambardárs.
Dhermund	Núr Khán (more or less agrees with Abbás of Tamman).	
Tamman	Abbás Khán ..	Shahnawáz.
Trap	Aulia Khán .. Fatteh Khán.	Budha Khán.
Multán	Dilasa Khán ..	Fatteh Khán.
Pátwáli	Ghulám Hussain ..	Manga.
Budhiál	Muhammad Khán .. Faiza.	Haidar.
Dhaular	Khán Bhára .. Muhammad Nawáb Khán, his uncle.	Muhammad Khán. Fatteh Khán.
Mogla	Allah Dád Khán, &c. (not much to do with the Láwa parties).	Aulia Khán.
Saghar	Allahyár Khán ..	Sultan Mahmúd.
Sangwála	Khán Beg ..	Muhammad Khán.
Pihra Fattial	Muhammad Ashraf	
Tallagang	Fazl .. Fatteh Khán ..	Fazl Iláhi. Muhammad Khán.
Jhátla	Ghulám Muhammad ..	Fatteh Khán.
Chinji	Nawáb Khán ..	Other lambardárs.

These factions have ramifications extending into the Pind Dádan Khán Tahsil, over the Shahpur Salt Range and down into the Shahpur plains; it should be noted that in some cases, *e.g.*, in Tráp and Multán, the adherents of the rival parties are very good friends amongst themselves; elsewhere the contrary is the case, as in Dhaular and Saghar, where they quarrel vigorously with each other, but have really very little interest in the Láwa factions.

The party feeling shows not the slightest sign of dying out, as from the fact, that the rival factions in Láwa intermarry freely, it might have been expected to do; Sultán Mubáriz, for instance, is a near relation by marriage of Ujjal Khán, and so with nearly all of them; but in this matter of marriage they are perhaps driven by necessity, as amongst the Awáns marriage within the clan or Múhí is usual; so they have not much choice. But in some villages mentioned above the partisanship is of a lukewarm character, and amounts to little more than this, that if a member of one of the parties has occasion to go to the village he will put up with the local adherent of the faction to which he belongs.

The principal Awáns are in Tallagang Tahsil, Ujjal Khán, Sultán, Mubáriz, Azíz Khán, Muhammad Khán, Sher Muhammad, Ahmad Khán, etc., all of Láwa; Shah Nawáz and Abbas Khán of Tamman, Sarfráz Khán of Tráp, Ghulám Muhammad of Patwáli, Mir Khán of Dhermund, Fazl Khán, Fazl Iláhi and Fateh Khán of Tallagang, Muhammad Ashraf and Subedar Major Mahr Khán of Pihra Fattiál, Allayár Khán, etc., of Thoa; Khán Bhára of Dhaular, Jahán Khán of Pachnand and Alláhdad of Mogla; in Pinidigheb Tahsil, Nurkhán, Zaildar of Dhak, Fateh Khán of Jalwál, Fateh Muhammad of Maira, Fateh Khán of Jand, Fateh Khán of Jángla, Naib Tahsildar, Abdul Rahmán of Nawára, Muhammad Khán, Ressaldar-Major, Pindigheb; in Fatehjang Tahsil, Akbar Ali, Zaildar, Jhán and Sherzamán, Inamdar, Batthu; in Attock Tahsil, Malik Muhammad Amin Khán of Shamsabad, Jagirdar and Zaildar, and Malik Hayat Khán, Zaildar of Bhallar Jogi."

Twenty years later names had changed, but the spirit of the tribe was much the same. It is to be remembered that, as the crow flies, Láwa is 90 miles south from Campbellpur; the quickest approach is to go still further south, fourteen miles across country to Músa Khel, and thence thirteen miles by road to Miánwáli whence once a day a train runs. Injra, the nearest direct station, is 40 miles away, and across the path are two formidable ravines, that of Kot Kázi and the Ghabir, which at times are impassable. Tallagang Tahsil, because of its distance from control, is known among tahsildars as "Yágistán," the land where, within limits, men are laws unto themselves. And Láwa is the most distant centre in this Yágistán. Matters mend when the District Magistrate spends some of the summer at Sukesar, and is able to do something to check quarrels at their source, and to hear cases himself on the spot. The manner of life of the Awáns of Láwa deserves a passing mention. The zaildars of four zails and two inamkhors all live in or near the main village, and each of them, and in addition several of the wealthier zamindars, maintain a state comparable to that of the Roman patron and his clients. To the 'Hujra,' or guest house of the patron, there flock each evening the clients, for smoke and gossip, and there is engendered a spirit of comradeship, which is strengthened when, as opportunity serves, the patron, with the aid of his clients, succours or avenges another client in distress. The lanes of Láwa are very narrow, and very provocative of trouble is the old established custom of young bloods to hang about these lanes, flashing their brass-studded lathies or their ornamented axes, and indulging in foolish jesting as the women pass down the long trail with their pitchers to the *kas*, the river bed,

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Population.

Awáns—contd.

whence alone comes the water. An imprudent word, a sharp reply, a curse, a blow, and may be a riot and murder will ensue. Then the clients gather round their patron, and if the event has been really serious, the smaller patrons round the Zaildar ; and the details of the report to be made, or the defence to be taken, and it may be the hiding of the criminal, are arranged long before the thana hears a word of the happening. There is much inter-marrying : seasons at times are very hard : land is very variable in quality : there are vast acres of shamilat, much of which has been encroached upon : cattle stray, and the courts are distant. Till very recently there was no hospital, no telegraph, and only a primary school. Small wonder that quarrels have been wont to arise, and be settled out of hand. An evil diagnosed is an evil half overcome. In 1927 a telegraph office was opened, the Maliks themselves guaranteeing any deficiency in the revenue over expenditure ; land has been given and funds contributed to the now flourishing Garbett High School and Garbett dispensary. The Garbett Cow Protection Society* is doing much, not only to improve the breed of cattle, but also to bring together in a single society the interests of the Hindu money-lender and the Muslim Zamindar.

Of the names recorded in 1906, Ujjal Khán's fame lives, but he is now succeeded by his grandson, Fateh Khán, a promising young man. Sultán Mubáriz died in 1928 leaving three widows and by each a son. Aziz Khán was murdered in 1920 by outlaws whom he was hunting ; Muhammad Khán left four sons, of whom Allah Yár Khán is a tahsildar, and Yárán Khán, for good services to the police, a jagirdar ; Ahmad Khán still lives, and has four sons, each in service. Sháh Nawáz of Tamman is represented by his young grandson, who is well cared for by Khan Sahib Muhammad Khán, Honorary Magistrate of Tamman. Abbas Khán has faded from the picture and his son Alláhyár is a degenerate ; on the death of Sarfaráz Khán of Trap, his inám was divided ; Ghulám Muhammad of Patwáli left no successor comparable with Khan Sahib Muhammad Khán of Tamman : the family of Mír Khán of Dhermund has fallen on evil days. In Tallagang, Fazal Khán is well represented by his grandson, Ghulám Haidar ; Fazal Iláhi is still alive, but his reputation has lost its earlier brightness. Fateh Khán has been succeeded by Lál Khán : Muhammad Ashraf of Pihra Fattiál, handicapped by lameness and debt, is nevertheless an energetic supporter of Government. Allahyár Khán of Thoa Mahram Khán has left no one adequately to succeed him : the sons of Khán Bhara of Dhaular were involved in a murder case ; the family of Jahair Khán of Pachnand have distinguished

*See page 189 Dhanni Cattle Breeding Societies.

themselves in the field; Allahdád of Mogla lost his temper and his position in a quarrel that had fatal consequences: the Zaildari of Dhak has passed to Captain Ahmed Din, A. D. C. On Fateh Khán's death the Jalwal inám went to Nara, and similarly on the death of Fateh Muhammad of Maira, their zaildari passed to Mahram Khán of Nalhad. No other names in this tahsil survive.

CHAP. I. C.
Population.
Awáns—*concld.*

In Fatehjang, Sherzamán of Bathu survives; Akbar Ali has been succeeded by Jehána; and Subedar Ghulám Muhammad has been created zaildar in Lunda Maira, a selection that is proving a success. In Attock the Awán is predominant, and the leading Awán in the district is Khan Bahadur Malik Muhammad Amín Khán, O.B.E., M.L.C., of Shamsabad, Jagirdar and Zaildar. A notable Awán squire is Malik Jabár Khán, grandson of Malik Hayát Khán of Bhallarjogi, who with his three brothers is greatly respected in his Zail: and the family of Fateh Khán of Sarwála deserves mention.

Among themselves the Awáns have many quarrelings and many parties; but against their common rival and enemy, the Khattar, all will at once unite. In the War they bore a distinguished record. A number of villages were granted memorial tablets in recognition of their excellent recruiting.

PATHANS.

Next to the Awáns in numerical importance come the Patháns who number about 42,000 and make up 8·1 per cent. of the total population of the district. There are two Pathán settlements in the district, one in the south-west corner of Pindigheb Tahsil at Makhad and in the Narrara hills, the other in Attock Tahsil, chiefly in the Chhachh *ilaqa*.

The Sagri Patháns of Makhad.

The Pindigheb Patháns number about 6,500 and are practically all Sagri Patháns, a branch of the Buláki Khataks. The Bábar family of the Bangi Khels, who are a practically independent sept of the Sagri clan, occupying portions of the Mianwali and Bannu districts, is also represented in the Narrara hills, and there are also about six hundred members of the Jamal Khel sept.

Beyond any doubt the Sagri Patháns came across the river from Kohát and drove out the Awáns, whom they found in possession. They are said to have conquered the Awan country as far east as the Jhelum, but about the middle of the 17th century they relinquished the greater part of this tract. Their advent to the district was comparatively late. The Khataks had not established themselves in Kohát till the end of the 15th century, and their first conquests were north and south of Kohat on the western

CHAP. I. C.

Population.

Patháns—contd.

bank of the Indus. The present family of Makhad appears to have established itself there in the time of Ahmad Sháh Duráni and in Akbar's time the Khataks were all across the river. There is no historical record of their connection with this district before the Duráni invasions. The story of their conquests up to the Jhelum is probably unfounded or at most is based only on occasional marauding raids. Before Sikh times they had settled down to their present limits and remained in their breaches in the turbulent days of violence and the rise of the Ghebas. Their settlement in the district is probably not earlier than the middle of the 18th century. They own 7 villages of which Makhad and Narrára are the largest. Hadowáli is their boundary on the east, where the Awáns are their neighbours, and is said to derive its name from this fact. Throughout the tract they occupy they have completely dispossessed all other tribes, and live completely apart from the rest of the district marrying only among themselves, and having little to do with the other inhabitants of the Tahsil. They are good cultivators though their country is stony and infertile. Of fine physique and brave independent character, they make excellent soldiers and take military service freely. Every village is full of military pensioners and the number of native officers is large. Many of them become merchants, and more still trade in sheep and goats. With the Khatak love of horses, they used to gather ponies from the frontier and trade with them as far south as Calcutta : but the trade is now almost extinct. Their country is poor even for Pindigheb, but what with pay, pensions and the profits of trade, they are generally in good circumstances. Their speech is the soft or western dialect of Pushtu, though almost all the men can understand and use the Punjabi of the district.

Though not generally popular with Punjab officials, who do not understand the language or the ways of Patháns, they are yet one of the most manly tribes in the district.

Their head is the Khán of Makhad who owns Makhad and has large jagirs and miscellaneous dues. The headship of the family has now for two generations fallen into unworthy hands, and the Khán has ceased to have any influence with his tribe. In 1927 for some months he was under treatment in the Mental Hospital, Lahore. His place is being taken by his son, Khán Sher Ahmed Khán, a Chief's College boy of great promise. He has before him the difficult task of regaining the honour of his family, tarnished both by his immediate forbears, and by Ghulám Sarwar, the dissolute cousin of the Khán and son of the Dost Muhammad, who in 1906 as Zaildar, had won universal respect.

CHAP. I. C. — Population. — Patháns—contd.

The Zaildar of Narrára is Sardar Bahadur Subedar Major Arsala Khán, too old—he has drawn his pension for 35 years—for active service: but the district is proud of his record.

A feud has arisen between the Pír of Makhad and the Khán of Makhad, the latter objecting to the growing temporal power of the former: and complaints from either quarter have to be watched accordingly.

The Attock Patháns.

The Attock Patháns, who are responsible for half the revenue of that Tahsil and own more than a third of it, are to be found in all the circles, but are only a small body in the Sarwála. In the Chhachh they own about 78 per cent. of the circle including all the best lands, pay 78 per cent. of the assessment, and comprise 82 per cent. of the landowners. In the Nala circle they lie chiefly along the line of the Haro, and own a quarter of the circle, paying a third of the revenue.

These Attock Patháns have nothing to do with the Sagri Patháns of Makhad from whom they are separated by the Kala Chitta and the country of the Khattars and the Awáns. The total number is just a little short of 30,000. They are a heterogeneous body including Patháns Proper, Afgháns and Ghilzais. Table IX of Volume B gives some of the main divisions. The largest group is the Alizai who include the Tarkhelís, one of the three main septs of the Alizais. The Tarkhelís inhabit the Haro villages of the Nala circle. The Saddozais and the Alizais are both sections of the Utmanzais who, like the Manduris and Barahzais, belong to the Yusufzai tribe. By far the greater proportion of the Attock Patháns are Yusufzais, allied to the Patháns on the opposite side of the Indus in Pesháwar District.

The connection of Patháns with the tahsil is not very ancient. The earliest comers may have been the Lodís, who are a section of the Ghilzai nation, and accompanied Mahmúd Ghaznavi as mercenaries on his invasions of India. Their numbers are inconsiderable. Next after a long interval came the Dilazaks who were gradually driven east from the Sufed Koh by the Yusufzais. About the end of the 16th century they crossed the river, and found the Chhachh, then a swamp being slowly recovered from the Indus, in possession of the Gujars. Apparently they never settled down and in consequence of the turmoil caused by their constant attempt to recover the Mardán *ilaqa* of Pesháwar from the Yusufzais, were finally deported by Jahángír and scattered over the Indian Peninsula. They claim to be Patháns Proper, but the claim is not always acknowledged. It has been conjectured that they are probably of Scythian origin. They now number about 1,000 in the district.

CHAP. I. C. Population. Pathâns—contd.

The great Pathán invasion of the Chhachh took place much later. About the end of the 17th century the Khataks, pushing up from Kohát at the south, began to press on the flanks of the Yúsufzais, and seized on the high way between Attock and Peshâwar of which they had been put in charge. At the same time too the Gujars of Hazára had summoned the Yúsufzais across the river to help them against the Tarins, a tribe of original Afghâns of Jewish and Arab origin, who had fallen on the Harípur plain. Later in the middle of the 18th century the Píro Khels, who are Shinwári Afrídís, and Pathâns Proper, came with Nadir Shah perhaps from Persia, and remained behind when he returned. By the end of the 18th century Dilazaks, Tarins, Yúsufzais and Afrídís had settled down in the Tahsil, with the Yúsufzais numerically immensely superior. Since then no immigration has taken place. The chief accretion to Pathán strength has been that of the Akhund Khels. Akhund is the title given to any chief of special sanctity and Akhundzáda is the title of his descendants. But the name is often used synonymously with Mulla, and applied to anyone who can read the sacred books. Many of the Akhund Khels are by origin Gujars or Awáns, perform no priestly functions, and live like the ordinary Pathán. The Tarkheli Pathâns who inhabit the north-east of the Tahsil below the main wall of the Gandgarh hills and along the line of the Haro by tradition and sentiment have little to do with Attock. They live or own land across the border in Hazára District, and many are jagirdars. The tract is very poor, their habits are improvident, and as agriculturists and revenue-payers they are unsatisfactory. They are not well off. The Pathán of Attock Tahsil is a curious blend of farmer, trader, lawyer and cut-throat. As an agriculturist he is excellent. In 1907 he was reputed to be also " an excellent revenue payer. This virtue he can no longer claim. Individual pride and petty jealousies are such that nearly every landowner wishes to be his own lambardar : and just to assert his own independence, or to worry his enemy, the official headman, he is apt to postpone payment of Government dues as long as possible. The promptitude of revenue collection in this area is a measure of the tact and firmness of the Tahsildar and his staff.

About 40 per cent. of the Chhachh is cultivated by the owners. Unlike the Sagri Pathâns of Makhad the Attock Pathâns did not wholly dispossess the former inhabitants, and there is a large body of tenants, Awáns, Gujars and others. A good deal of the cultivation by tenants is due to the increasing readiness of the Pathán to leave his home and go abroad in search of new experiences. But whenever the Pathán owner does not himself cultivate, he is

CHAP. I, C.

Population.

Patháns—*contd.*

an exceedingly careful manager, and there is very little waste. Enterprise is a very marked characteristic. The tongas of Pindi are nearly all driven and owned by Chhachhi Patháns. (*Vide* page 61). The cattle trade engages others. Men go down to Amritsar, and buy up large herds, which they drive up towards Peshâwar, sometimes, it is said, through the Chenab Colony, with a view to agricultural requirements, and sometimes along the Grand Trunk Road through the various cantonments, where the animals are bought up for slaughter. In consequence the Patháns are fairly prosperous. When a Pathán goes on service he protects his land from his relatives by mortgaging it to a stranger. His litigiousness is thus described by Mr. Butler, Assistant Settlement Officer :—" It must be remembered, however, that the Chhachh has become more and more the home of dubious litigation, and that such a thing as a true mortgage or sale deed cannot so much as be imagined to exist. If, therefore, elsewhere the figures tend to be inflated to defeat the claims of pre-emptors, in the Chhachh the tendency must be infinitely greater To show the sort of problems which arise, the following typical case which came to light may be quoted. A proprietor, A, being in debt to a money-lender, and fearing that his land might be attached, executed a bogus sale deed in favour of his intimate friend, B, who obtained mutation and nominally kept on A as his tenant. After a certain period B's natural inclination to deceit asserted itself, and, on the solicitation of C, A's enemy, and for a private consideration of a few rupees, he executed a bogus sale deed, purporting to transfer the land to C for full consideration. C then proceeded to harass A, his nominal tenant-at-will, and on the worm turning and beginning to take the matter into court, executed yet another bogus sale deed purporting to transfer the land to D, A's son, with whom A was on bad terms, thus ingeniously stirring up a family quarrel, from which A could reap no real advantage, even if he succeeded in a suit against his heir."

Though of good physique the Pathán does not readily take military service. That means a sacrifice of independence, and the Chhachh Pathán is more of an attorney than a fighting man.

Thus the response to recruitment in the Great War was only fair, though some individuals achieved brilliant distinction. The Pathán best known outside the district is Captain Ajab Khán, O.B.E., O.B.I., I.O.M., who, after a distinguished Military career, has returned to serve his fellow countrymen in civil life. He is an Honorary Magistrate and has held a seat in the Legislative Assembly. In co-operation, education and all forms of village improvements he is ever to the fore. His brother Khán Sahib

CHAP. I, C.

Population.

Patháns—concld.

Hásham Khán was in the Hong-Kong Police and now is a great help in District affairs. A third brother holds a high post under the Hong-Kong Harbour Board. Najaf Khán of Ghurghusti, Muzaffar Khan of Malakmala and Humáyún Khán of Harun are other leaders of the tribe.

Jodhras.

By far the principal tribe in Pindigheb, and perhaps the tribe of highest standing in the whole district, is the Jodhra tribe. They inhabit the south-east of Pindigheb Tahsil, the valley of the Soan extending on the south to the Tallagang border, and on the north reaching to the watershed which runs across the Tahsil, and along the Fatehjang boundary running up as far as the railway. They own only a little less than a third of the cultivated area of the Tahsil, and pay rather more than a third of the revenue.

Their own account of themselves is that they are of Rájpút origin and derive their name from Jodhra who was converted to Muhammadanism by Mahmúd Ghaznavi and settled in Jammu. Some generations later they migrated to the Sil valley and founded Pindigheb (then called Dirahti) on the north bank of the Sil. Later they moved their colony to the south bank. At any rate they are of Hindu origin, still retaining traces of Hindu customs in their festivals and ceremonies. Another account gives their original home as Hindustán. They appear to have come to the district about the end of the 16th century as a small band of military adventurers. They possessed themselves of the Soan and Sil *ilaqas* and much of Tallagang, ruling these tracts from Pindigheb. Awáns, who were in possession, were not evicted, but remained on as tenants under the conquering Jodhras. The Jodhras never themselves cultivated. The former owners sank to the status of tenants. Ownership of the soil vested in the new comers who were regarded as independent chieftains paying no revenue to the Government of the day further than an occasional present of a horse, mule or hawk by way of *nazrana* or tribute, and keeping up large bodies of armed retainers. Their government over the surrounding country was probably close. Though engaged in constant strife with the surrounding tribes they found time to develop the resources of the surrounding country, and founded the great majority of the villages in which they now possess rights of various kinds. Their power was recognised by the Mughals, and Malik Aulia Khán, who is the first Malik of much importance known to history, held a revenue assignment of Pindigheb, Tallagang, and parts of Chakwál and Fatehjang. It was probably he who overran Tallagang. His son Malik Amánat Khán was equally powerful. In his time the Sikhs came. They found the

Jodhras at their zenith. Apparently there was little difficulty in imposing a rough Sikh superiority on the small but warlike tribes of the district, but systematic government was never attempted. In the chapter on History the available information on the Sikh period has been given. It is enough here to notice how the Jodhras declined. At once they lost Tallagang and Chakwál over which they had never really established their authority. Gradually the great power of the Pindigheb family was frittered away. It had always been the centre of the Jodhras, the trunk from which all the outlying families branched off, and the fountain of all authority. First the Langriál family was allowed to secede. Then the Khunda, Kamliál and Dandi families broke away. Finally the rise of the Ghebas robbed them of the Soan, curbed their power, and gave them a restless and energetic rival at their doors. During this troubled time the ruling family contained no men of power. The chiefs were lazy, licentious and incompetent and from a love of ease allowed great opportunities to slip past. But they are still the nobility of the tahsil. They number less than two thousand, and retain their position of grand seigneurs. Their love of show and their abstinence from cultivation and healthy occupation are still, unfortunately, the most common characteristics of the Jodhras of the younger generation, as they were, with certain brilliant exceptions, of their forefathers. They have lost too the saving graces of the earlier generation, which delighted in sport, especially hawking, and horse-breeding. Their tenants were cared for, and cultivation was controlled with firmness but generosity. These days are passing. In a few villages sub-division of holdings has gone so far that the Jodhra is compelled to work for a living, but the great majority cultivate through tenants. They are generally fine, well-made men, but jealous and litigious and much divided by rivalries and animosities.

There are five principal families. By far the most important is that of Pindigheb. Two branches of the family are recognised, and at present there are three members of the senior branch and two of the junior. The elder branch is that of Aulia Khán, the members being Khán Bahadur Nawáb Ghulam Muhammad Khán, who is the head of the whole family, Malik Jang Bahádur Khán and Malik Muhammad Zamurad Khán. The second branch is that of Fateh Khán, whose members are Khán Sahib Captain Muhammad Akbar Khán and Khán Bahadur Muhammad Amir Khán, Honorary Magistrate, 2nd Class. The longevity of the family is remarkable. Everyone of these names was mentioned in 1907. The Nawáb's mother was a daughter of the Fateh Khán of Kot whose prowess in the war of 1848-49 is recorded at page 52.

CHAP. I, C.

Population.

Jodhras—*contd.*

and died in June 1928 at the reputed age of 115 years. An outstanding personality is the Nawáb. His memory a store-house of anecdote, his wit pungent ; except on rare occasions he talks but little, but when he opens his mouth, 'no dog dares bark.' He has a son, Malik Allahyár Khán, and grandson : and the ambition of his life is to see the feet of these two set on the ladder of success. Despite the weakness of their representatives during Sikh dominion and at annexation, the family still has great possessions. The five Maliks now own six entire estates and the greater part of six other villages, and have talukdári rights in 26 other villages.

According to the custom of the family the eldest son always gets two shares, so that the present head of the eldest branch owns one-third of the whole property. This family is well off, but subdivision and quarrelling have prevented them from attaining the position achieved by the solitary Sardar of Kot.

Next in importance to the Pindigheb family are the Jodhras of Khunda. They are numerous, but do not hold on hereditary shares, so that most of them have but small holdings, while a few have large estates. In all, the Khunda family own 18 villages in the north-east corner of the tahsil. Among the large owners sub-division has not gone far. Itibar Khán, who succeeded his uncle Abdulla Khán, was in 1906, the largest landowner in the tahsil, not excepting even the head of the Pindigheb family. He was a man of great natural ability who produced very different impressions on different officers with whom he came in contact. He had great influence in the centre of the tahsil and acquired a good deal of land in the surrounding villages and in the Awankari. Itibár Khán has left two sons, of whom the elder, Malik Kháki Ján, though of suitable age, did not enlist during the Great War, in consequence of which his succession to his father's seat in Durbar was delayed. He is now a Durbari and an Honorary Magistrate on the bench at Campbellpur.

Jahán Khán, another member of the same family, also of Khunda, bears a very high character. In his younger days he was a noted horse-breeder, and he still keeps good mares but no longer in this district. The enmity between him and Malik Kháki Ján is a traditional and regrettable feature of Pindigheb politics. On Jahán Khán's side is his brother-in-law Nawáb Khán, whose son Muhammad Akbar Khán is to the fore in local affairs.

The Dandi family own ten villages and reside at Dandi on the north bank of the Sil opposite Pindigheb. They are closely related to the Pindigheb family, but sub-division has gone far, while

CHAP. I, C.

Population.

Jodhrás—concld.

litigation and quarrelling have reduced them to comparatively poor circumstances. The chief man in Dandi is Ghulám Muhammad, pensioned Subedar and Zaildar.

The Kamliál family own seven villages. They are now very numerous and claim no one of special note. The Langriál family, owning three villages, still have a great deal of land, but they are notorious for debauchery and extravagance, and much of their land has gone beyond recall. They are no longer of importance. The Jodhrás possess a great deal of influence in the district. Native officials who do not please them are likely to find themselves very uncomfortable. It is regrettable that the family have no military traditions. Such service might be the saving of them.

Ghebas.

The ancient enemies and rivals of the Jodhrás are the tribe designated in the first edition of this Gazetteer as Ghebas, which considers itself Mughal. During the War the tribe supplied some fine officers to the army, of whom Lieutenant and Subedar Major Báz Khán of Malál is perhaps the most distinguished.

The following is taken direct from the Gazetteer of 1907:—"They inhabit the western portion of Fatehjang Tahsil, a solid block of villages reaching to the Kála Chitta on the north, to Fatehjang and Sagar on the east, and almost to the Sil on the south. They cover 34 per cent. of the total cultivated area of Fatehjang Tahsil, and pay 19 per cent. of the land revenue. They are found in no other tahsil. Their numbers are small. The table on page 65 gives the number of Gheba owners as 1,587, but the enumeration is faulty. Most of them own land in several villages and are counted over and over again in each village, while a few petty villages of small holdings and numerous owners have been included only on the ground that they claim connection with the Ghebas. The total number of true Gheba owners cannot be as much as 500."

The origin of the Ghebas, like that of many other tribes in the Western Punjab, is obscure. They themselves claim Mughal origin, and are always entered in the revenue papers as Mughals, resenting the use of Gheba as applied to them. In the census enumerations they have always returned themselves as Mughals. Gheba they describe as simply a nickname applied to them because they live in the Gheb. Another account which they give of themselves and which is generally accepted in the countryside connects them with the Siáls of Jhang and the Tiwánás of Shahpur. The story of Teo, Seo and Gheo, from whom the Tiwánás, Siáls and Ghebas respectively are descended, is well-known. This assertion is destructive of their claim to Mughal origin, and would fix the Ghebas as of Rájpút Punwár origin. Another theory is that they

CHAP. I, C. Population. Ghebas—contd.

are really a branch of the original Jodhra tribe who quarrelled with the others, and took the name Gheba, which till then had been simply a title used in the tribe. The fact that the town of Pindigheb was built, and is still held, by the Jodhras, and not by the Ghebas, lends some support to this statement. Whether Gheb is simply "the country of the Ghebas" or Gheba simply "an inhabitant of the Gheb," the tribe is almost certainly indigenous to the Punjab, and foreign to the district. The settlement of the tribe was almost exactly similar to that of the Jodhrás. They were a small warlike band, irresistible to the Játs, Gujars and Awáns who preceded them, and always brave and powerful enough in the turmoil of inter-tribal strife to retain the tract they had won. They appear to have come to the district about the same time as the Jodhrás, and from the first to have settled in the tract between the Kála Chitta and the Khairi Murat. Their history makes it not improbable that they were in some way dependent on the Jodhrás of Pindigheb, their position being not very different from that of the Khunda and Kamliál branches of the Jodhrá tribe. A not improbable conjecture is that they were a small band of broken Rájpút families, fleeing from the Central Punjab, who joined the Jodhrás, and settled down on their borders. Till 1825, they certainly occupied a position subordinate to the Jodhrás of Pindigheb, who till that year were responsible for the revenue of the Gheb. The later years of Sikh rule are the period of Gheba rise first to complete independence, then to equality with the Jodhrás. Rae Muhammad Khán of Kot was the first chief to exalt the horn of the tribe. He was a man of much power and energy, so influential that he stood to the Sikhs in the relation of an ally rather than a subject, and so turbulent that the record of his violence and crimes remains to this day. With the name of his son and successor Fateh Khán, the glory of the Ghebas is inseparably connected. At the head of the Ghebas, though at feud with most of them, and owning 13 entire villages, about two-thirds of eight other hereditary villages, and in addition shares in several other villages, which he bought or in other ways acquired, he was for many years supreme in his country under the west corner of the Khairi Murat. Invested with magisterial powers in his own *ilaqa*, feared and admired by all, he wielded an amount of power which was perhaps unique outside an independent State. Even to the present day the Kot estate is always called the Kot *riásat*, and the administration is the *sirkár*, while officials of the Government are known but as "English officials." Such an administration could not have been left for so many years had it not been substantially just and honest, and liked by the people.

CHAP. I, C. Population. Ghebas—contd.

But in spite of their prosperity and power the Ghebas have never held a very high place socially. They intermarry freely with the Jodhrás of Pindigheb, and with the Alpiáls of the Sil Soan, but though they give in marriage to big Awán families, Awáns do not generally give to them, nor look upon them as their equals. They have nothing of that pride of birth which is so marked a characteristic of the Ghakkars and Janjuas of Ráwalpindi. Generally the Ghebas are well off and thrifty, and though they all hate one another and love to tell of former murders and treacheries, yet there is ordinarily neither litigation nor crime among them, still less extravagance. The Ghebas of Dhurnál alone have fallen on evil days, and provide to the countryside a wholesome example of the evils of litigation and extravagance. They own 58 villages.

They are a fine, manly, well-built race, delighting in hawking and field sports, horse-breeders and good horsemen, and not unlike the Jodhrás, with whom they alternately fought and intermarried. Most of them are still well off, and they own far too much land to cultivate with their own hands. As landlords they are severe with their tenants, but are not unjust, nor are they generally disliked, while they are always ready to turn out with all their resources when anyone attempts to trouble or interfere with their tenantry.

Their bitter feuds with the Jodhrás and Alpiáls, and the even more determined feuds among the prinicpal Gheba families have not yet died out. The marriage of Malik Aulia Khán, of Pindigheb, with the daughter of Sardár Fatteh Khán, of Kot, coupled with the separation of the Fatehjang Tahsil from that of Pindigheb, did something to close the bitter blood feud, but intermarriage between the families of old enemies has little effect in stopping the dearly cherished ancestral feuds. The intermarriage goes on freely, but the ill-feeling, though perhaps softened, still remains. The different families cannot now openly attack each other, but it is very doubtful if they like each other any the better for that."

So ran the Gazetteer of 1907.

By 1930 the very term Gheba has fallen into disuse, and, if heard, is now associated rather with the Jodhrás of Pindigheb than the Mughals of Kot and Malál.

Inspite of the historical reasoning embodied in the foregoing sections, the fact remains that these so-called Ghebas are admitted as Mughals by the countryside, and that while both in colouring and feature resembling one another, they are readily distinguished from the typical Jodhrá countenance ; on the other hand, it is a

CHAP. I, C. Population. Ghebas—*contd.*

fact that there is considerable resemblance between the Mughals of the Gheb and the Alpiál Rájpúts. In earlier days there were two rivalries: that between the Sirdars of Kot and Malál for the supremacy of the tribe we will call Mughal, and that between the tribe and the Jodhrás. Thanks partly to intermarriage, but more particularly to the generous and consistant policy of Sirdar Muhammad Nawáz Khán, the present Sirdar of Kot Fateh Khán, the disputes and jealousies of 1907 have faded into insignificance.

The Sirdar of Kot is, without dispute, the premier gentleman of the district, as he is the most important of all the Mughals. Fateh Khán died in 1894, when his property with his jagirs passed to his brother's grandson, Muhammad Ali Khán, who died in 1903. Hassu Khán, one of the Sirdar's distant collaterals, owns large shares in several of the Sirdar's villages, and is a Zaildar and Jagirdar. In 1903 Muhammad Nawáz Khán, son of Muhammad Ali Khán, then a boy of 9, became a Ward of Court. He was educated in England, and passing through Sandhurst, received a King's Commission and served with the 3rd Hussars, for 1½ years. His duty to his estates recalled him to civil life, and he is now respected as a model proprietor. He is an Honorary Extra Assistant Commissioner, Honorary Magistrate and Honorary Sub-Judge. There is no beneficent branch of the administration, whether it be the co-operative, horse-breeding, sheep-breeding, medical, or any other, which is not patiently and generously tried out in his estates. In 1927 he was elected to the Assembly, where his moderate counsels and sound policy won him a distinguished place in the "Independent" Party. "*O si sic omnes.*"

Next to the Kot family the most important family among the Mughals of the Gheb is that of Malál. This family calls itself Bhandiál, from Rai Bhandi Beg, an imaginary Mughal ancestor. In earlier days it was always at feud with the family of Kot, and it was its head, Budha Khán, who was concerned in the assassination of Rai Muhammad Khán of Kot, at Pahag in 1831. The present head of the family is Nawáb Khán, a comparatively feeble successor to his father Fateh Khán, a man whose presence and influence are still remembered. Mehr Khán, one of his brothers, is still alive; Hayát Khán is represented by his son Lieutenant and Subedar-Major Báz Khán: a fine old warrior.

The Mughals of Dhurnál own four villages. Their headman is Nur Khán, son of Drab Khán of Dhurnál. The family of Shahr Rai Sadullah, whose head is Sirdar Khán Mulk, a keen horseman, also owns four villages, while the Mughals of Manjia, own three villages. The chief Mughal in Manjia is Fateh Khán, Zaildar, and in Shahr Rai Sadullah, Karm Khán, Inamdar. The three

Ghebas—*concld.*

branches of the tribe are Rewál, Bhandiál and Sihál. The Kot, Dhurnál and Shahr Rai Sadulla families are Rawáls. The family of Malál is Bhandiál, and the Majhia family is Sihál.

Alpiáls.

The Alpiáls are quite unlike the two tribes which have just been described. They have all the characteristics of Awán owners and have nothing in common with the large landed proprietors of Fatehjang and Pindigheb Tahsils. They are confined to the Sil Soan circle of the Fatehjang Tahsil, and most of them hold land along the banks of the Soan.

By origin they are admittedly Rájpúts and at the census of 1881 recorded themselves as Manj Rájpúts. They appear to have come to the district about the same time as the Jodhrás and Ghebas, having first wandered through the country now contained in the Khusháb and Tallagang Tahsils before settling down in the southern corner of Fatehjang. There are still traces of Hindu origin in their marriage ceremonies as is the case with many of the Rájpúts of the district.

They own 32 villages in Fatehjang. Holdings among them are small, averaging a little over five acres. Hard-working and excellent cultivators, generally tilling their own land and working laboriously on their own wells, they have taken only a small part in the more lurid history of the district. Socially they rank high, intermarrying freely with the Mughals. They are a bold, lawless set of men, of fine physique, much given to violent crime, sturdy, independent, and wonderfully quarrelsome. They are generally called litigious but are a thrifty folk, and seldom carry their cases to a civil court, while in a revenue court a great deal of trouble can be caused to neighbours and enemies and a great stir made with but little trouble and at small expense. They number a little over nine thousand. Of late years Alpiáls have begun to be enlisted in the army, and the experiment deserves to succeed, for these men should make fine soldiers, and in the wider atmosphere of the army may forget the petty quarrels of their valley.

With the exception of the Chakri family, which owns a good deal of land, there are no large owners among them. In 1907, Chaudhri Ahmad Khán, son of Chaudhri Sher Khán, was the leading Alpiál. He was succeeded by Sultán Khán, an Indian Officer in the 67th Punjabis, who met a gallant death in the field during the Great War. His son Fateh Khán, educated at the Chiefs' College, has now succeeded to the jagir and the seat in Darbar which the family holds. Other Alpiáls are Allah Dád Khán, Zaildar, of Pariál.

CHAP. I, C.

Population.

Alpiáls—concld.

According to the custom of the country the Alpiáls are split into two portions. The Chakri Chaudhrís in the wider district feuds used to side with the Malál Mughals against the Kot family, and lost several members of their family in the strife. But this is byegone history.

The Gazetteer of 1907 writes of the Khattars as follows :—

Khattars.

"*The Khattars are at once the most mysterious, the most interesting, and the most unsatisfactory tribe in the district. Ethnologically a problem more inscrutable than the Awán, socially of importance less than that of the highest tribes alone, politically a troublesome element in the district population, they form one of the most peculiar and curious tribes in the district. Their country, which is known by the name of Khattar, lies on both sides of the Kála Chitta, and runs in a narrow strip east and west from the Indus and across the district, into Ráwalpindi, where they own fourteen villages. They are thus to be found in Attock Tahsil, where they own 29 villages, in Fatehjang where their villages number 43 and in villages of Pindigheb Tahsil. Their numbers appear to have been underestimated at the various census enumerations, when many returned themselves as Awáns, but in all probability they do not exceed ten thousand. The census of 1901 showed their numbers as little more than six thousand, a decrease of nearly 9 per cent. in ten years. The enumeration was almost certainly faulty. The revenue records, by a process of excerption not altogether satisfactory, give the number of Khattar landowners as 4,265. An estimate of ten thousand is probably not far off the mark. Their origin, as has been said, is obscure. They claim connection with the Awáns (explaining* ignotum per ignotius) *and the Khokhars, all three claiming Kutb Sháh for their father, and tracing their descent from Ali. But the Awáns and probably the Khokhars repudiate the connection. The Khattar account of Khattar origin is given in Griffin's 'Punjab Chiefs' under the notice of the Dhrek family. Briefly it amounts to this. Chohán, the youngest son of Kutb Shah, the ancestor of the Khattars, and an officer of Sultán Mahmúd Ghaznavi, seized Bágh Niláb, in his days a large city, on the Indus, dispossessing the Hindu chief, Ráj Deo, and made it his headquarters. For many years his descendants held Niláb, till the Hindus in the time of Khattar Khán, growing powerful, drove them out across the river and into Afghánistán. But Khattar Khán, who had entered the service of Muhammad Ghori, soon returned, and in 1175, when his master was preparing to attack India, repossessed himself of Bágh Niláb by a stratagem. From that time date the present name of the tribe, who took the name of their leader, Khattar. the six chief divisions and the tribal dispersion over the present Khattar.*

Khattars—*contd.*

Of the sons of Khatar Khán—the story is repeated to give the present day divisions of the tribe, and their distribution—Sarroo Khán built Serhál. His descendants are known as Serháls, and are found in Pindi Serhál, Bahtar, Jhang, Bahlol, and Feroz Sháhi. Feroz Khan, whose descendants are called Ferozals, went to Fatehjang. The Khattars of Fatehjang, the Dhrek and Wah families, and the Usman Khattar branch in Ráwalpindi are Ferozals. Jand Khán crossed the Kála Chitta, and settled south of that range near the Indus in the ilaqa *which is to the present day called after him Jandál. The Nara Khattars are called Raniáls from a descendant of Jand Khán. Those of Nathiál, Thatta, Darnil, and Basál are called Jandáls. The Khattars of Gakkhar also are Raniáls. Isa Khán's descendants, who are called Isiáls, are found in Chhoi Gariála and Deerkot, north of the Kála Chitta. Balu Khán's descendants live in Barotha, where the Haro falls into the Indus, and in other villages between Bágh Niláb and Attock, and are called Balwáls. Mehra Khán's descendants live in Serai Kharbuza in Ráwalpindi. The Ghariáls who live in Akhori, north of the Kála Chitta, are descended from Feroz Khán. When this dispersion was complete, and about three generations after Khattar Khán, the tribe lost Bágh Niláb, but retained possession of the open country between Ráwalpindi and the Indus. Conjectures on Khattar origin are as various as the theories which seek to explain the Awáns. Mr. Steedman believed their claim to Awán origin, and said that an Awán admits it, but looks on the Khattars as an inferior section of the tribe to which he will not give his daughters in marriage. Others assign the Khattars a Rájpút origin. Griffin thought that they were originally inhabitants of Khorásán who came to India with the early Muhammadan invaders. Cracroft noted that 'one or two of their customs relating to marriage seem to point to their having been of Hindu origin. They may have been converted to Muhammadanism during one of the Sultán's (Mahmúd Ghaznavi) invasions.' General Cunningham would identify them with a branch of the Katar, Cidaritæ or Little Yúcha, from whom the Gujars also are descended.*

What is certain is that they came to the district before most of the tribes now prominent. They may have preceded even the Awáns, and been driven on to the Kála Chitta on the south by the Awán invasion and on the north by the hordes of foreign conquerors. Their own traditions would make them later than the Awáns, whom they alleged they dispossessed. But in the present state of knowledge they must be left an enigma. They may be an indigenous Punjab tribe, neither Jat nor Rájpút, but resembling the Awáns, whose residence was now cis-Indus and now trans-Indus, and who finally settled down in the comparative security of the Kala Chitta.

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Population.

Khattars—*contd.*

Of their neighbours, Ghebas, Jodhrás, Alpiáls and Awáns, they have affinities only with the latter, and it may be that the solution of the Awán problem would clear away the mystery that surrounds the Khattars.

Of their history within the district not much is known. They took little part in the turmoil in Pindigheb and Fatehjang in which the Ghebas found so excellent an opportunity, but they certainly prospered and extended their villages at Awán expense. Never do they appear to have attained any commanding position. Cracroft says they intermarried with the Khattaks, and thus acquired further power in the ilaqa *and they remained on good terms with the Sikhs, who allowed the principal families to retain their* Chahárams.

No one has ever had a good word to say for the Khattars. Bad agriculturists, bad landlords and bad revenue payers, lazy, dissolute and extravagant, they have always been a troublesome tribe. The Khattar has always had an unenviable notoriety for crime ; they are all at feud with one another ; none render any assistance to the administration ; crime is rife, and litigation of the most expensive kind continuous and unceasing. Socially they hold an intermediate position. They rank below Gakkhars, Awáns, Janjuas, Jodhrás, Ghebas and the higher classes of Rájpúts, but above the Játs or Zamindars.

Holdings are large, averaging about 50 (in 1930, 55) acres in Attock Tahsil, 45 (in 1930, 60) acres in Fatehjang, and 21 (in 1930, 25) acres in Pindigheb. In the last tahsil the Khattars, like the neighbouring Awáns, are in a depressed state. The lazy, dissolute habits which distinguished all Khattars, combined with comparatively small holdings, have brought them misfortune.

Much of the Khattar land is held by tenants, and the Khattar is a conspicuously bad landlord. He generally collects rents in kind, and is nearly always harsh and unreasonable, squeezing the tenants just when he should be generous, and unable to finance his tenants in times of distress and protect them in times of trouble. As a result he cannot collect rents or keep tenants so easily as better men can.

The chief family is that of Dhrek in Fatehjang, the various members of which own ten villages in the Fatehjang Nála, besides other villages in Attock and in Ráwalpindi. The family is described in Griffin's 'Punjab Chiefs.' It has suffered much from internal feuds, ruinous litigation and bad conduct. The heads of the family are Nawáb Khán and Karm Khán, who live at Dhrek, and lost their share of the jagir *by confiscation in 1906, Dost Muhammad Khán and Jahán Dád Khán of Bahtar, who each enjoy*

jagirs *of Rs. 372-12-0, and Lál Khán, whose* jagirs *amount to Rs. 500 per annum. Jahán Dád Khán is under restraint in the Lunatic Asylum, Lahore.*

The Khattars of Fatehjang itself, a numerous body, own seven villages. Their chief men are Samundar Khán, Divisional Darbari and Zaildar, Maula Dád, Fateh Khán, all of Fatehjang. The Khattars of Kutbal own three villages in Fatehjang and two in Ráwalpindi. There are no big Khattar families in Pindigheb Tahsil. Sadullah Khán, of Thatta, is a pensioned Subedar, Khushál Khán of Nara, and Muhammad Khán of Pind Sultáni are inamdars, but no one is of commanding importance.

In Attock Tahsil the chief Khattar family is that of Wah, described in Griffin's ' Punjab Chiefs.' "

Such was the picture in 1907.

There seem to have been three factors contributing to the ordinary character of the Khattar as so described. He was uneducated : he lived in a mountain fastness which was practically inaccessible : and he was very uxorious. A great deal of the litigation and feuds in which the family has indulged can be traced to the propensity of aged chiefs to contract marriage in their declining years and favour the offspring of their latest bride at the expense of the children of their life's companion.

Thus Sardar Nawáb Khán had by his first wife a son Saidullah Khán, the father of Sarwar Khán. His second wife was childless. Marrying again in his old age, he begot Muhammad Ashraf : Muhammad Akbar : and Ahmed Bakhsh : and gave these three the greater portion of his estate.

Similarly Sardar Karam Khán willed to Sultán Mahmúd and his young brother, sons of the wife of his old age, the greater portion of his land, to the detriment of Ahmad Khán, his first born.

Sardar Khuda Dád Khán at the age of eighty married a girl of sixteen : and the dowry allotted to her is so great as to disturb the peace of the offspring of his first two wives.

To struggle from such Avernian darkness as prevailed in 1907 to the daylight of honour is indeed a task. But their mountain retreat has been made accessible by the Fatehjang-Hassan Abdál road opened in 1928 : and the younger generation have set their feet on the path of progress. Sardar Muhammad Akbar, son of Jahándád Khán, takes interest in district affairs. Sardar Ahmad Bakhsh is qualified as a lawyer : has benefitted financially by the acquisition of his land for the Government farm at Campbellpur : and is not without ambition and powerful friends.

CHAP. I. C.

Population.

Khattars—*concld.*

The youngest generation of all have fallen to the care of the Court of Wards: *viz.*, the son of Sardar Karam Khán: and the son and grandsons of the late Sardar Dost Muhammad Khán. Rab Nawáz, son of Karam Khán, was born in 1919: and is being educated at Queen Mary's College. His mother made a second marriage with Muhammad Aslam Khán. Muhammad Hayát Khán, son of Dost Muhammad Khán, born on October 13th, 1917: and his nephews, Ifzal Ahmed Khán born on 16th February 1926: and Iftikhar Ahmed Khán, born on 2nd January 1927, sons of the late Nawáb Khán, son of Dost Muhammad Khán are all looked after by the same Manager who controls Rab Nawáz's estate.

The Dhrek and Bahtar Khattars have been entirely eclipsed by the Wah branch. Their history is given in detail in the "Punjab Chiefs." Established by the gallant Muhammad Hayát, who served Nicholson, the family has continued to progress. Sardar Mahsud Hayát entered the army and is still serving. In 1927 Captain Sikandar Hayát Khán, M.L.C., received the title of Khán Bahadur: and in 1929 became the Hon'ble Member for Revenue in the Punjab Government. His cousin Nawab Muzaffar Khán is Director of Information Bureau, Punjab Government. The family are growing steadily in wealth and importance. A distinguished Khattar in the Pindigheb Tahsil is Subedar Major Dost Muhammad Khán, I.O.M., of Thatta. His help is always prompt and effective whenever trans-border raiders or dacoits have to be repelled, and he commands a large following.

Janjuas.

Janjuas are now a very inconsiderable element in the district population. They own Jangal and two other villages in Fatehjang Tahsil, and Kot Sarang and an adjoining village in Tallagang. But beyond any doubt they were in early days predominant throughout the whole district from the Salt Range to the Kála Chitta. Bábar frequently mentions Malik Hast Janjua, describing him as "the Hakim of the Ils and Uluses in the neighbourhood of the Soan," and says that the Janjuas have been "from old time rulers and lords" of the Salt Range hills and of the tract between Niláb and Bhera. Probably Janjua occupation was more a lordship over subject races, Jats and Gujars who tilled the soil, than cultivating possession. This explains their almost total disappearance from the district. Their dominion, overthrown in Ráwalpindi by the Gakkhars, in this district fell before the Awáns and the Khattars. Long before the Jodhrás and Ghebas came, the Janjuas had disappeared. They make no appearance on the dark stage of later district history, and there is in popular imagination no trace left of the days when

they ruled the whole of the central uplands. Their social position and the respect in which they are held is due to the position which they occupy in the adjoining districts of Ráwalpindi and Jhelum. They are more in the district than of it, and it is not intended to discuss their origin and history. Reference must be made to the Gazetteer of Jhelum District.

CHAP. I, C.

Population.

Janjuas—*concld.*

They are essentially men of good birth, proud of their ancestry and readily engaging in military service especially in the cavalry. As agriculturists they are not praiseworthy, and their habits are unbusinesslike. Physically they are well-built with a noticeable fineness in hands and feet. They are usually addressed as Rája, and rank high in the social scale. Widow remarriage is not practised, and daughters are given only to Janjuas or Sayyads. In Tallagang the only Janjuas worth mention are the representatives of the once powerful Rájás of Kot Sarang, who are fast falling into insignificance. In Fatehjang the Janjua family of Jangal is popularly held in considerable esteem. Sháh Wali Khán, its head, is a zaildar, and a man of some position.

Miscellaneous Rájpúts.

Of miscellaneous Rájpúts the most important are the Bhattís and Chauháns. The latter are found practically in Pindigheb alone though there are a few in Fatehjang. Their headquarters are at Khaur in the south-east corner of Pindigheb Tahsil, and they own three other surrounding villages. They are fair cultivators, but are given to litigation, and are in consequence not in good circumstances. Socially they hold a very high position and are on friendly terms with the Jodhrás of Pindigheb. Their chief representative is Ghulám Muhammad Khán of Khaur, who is a zaildar.

Bhattis are scattered throughout every tahsil in the district. In Tallagang they hold seven villages, three of which lie below the Salt Range, and the rest in the north-east corner of the Tahsil near the Chakwál border. They are here unpretentious, hard-working cultivators, little esteemed socially. In Pindigheb they hold lands as full, or as inferior proprietors in the group of villages over which the Pindigheb Maliks have *talukdari* rights. In Fatehjang Tahsil they own seven small villages chiefly on the Ráwalpindi border. In Attock Tahsil they are of importance only in the Nála circle where they own two villages. Everywhere they are good cultivators and landlords, and bear a good character, but are of little social repute. Indeed it is worth remark that although there is some reason for believing that this tract is the original home of the Bhattis, and that the prominent tribes are of Bhatti

CHAP. I, C. — Population. Miscellaneous Rájpúts—concld.

Rájpút origin, yet the tribe is of less social and political importance here than in almost any district of the province. There are no Bhattis of sufficient prominence to deserve mention with the exception of Nagin Khán, Zaildar, and Sardár Khán, both of Hasan Abdál, and the tribe is important only as an industrious though small body of the agricultural community.

It will have been remarked that the number of sub-castes of Rájpúts notified for the district is very great. There is a special reason for this. When the new town of Campbellpur came into being, one of the most prominent contractors, who rapidly acquired wealth, was Tola Ram Singh, known to the world as an Arora Sikh. Later when he had become established, and his sons had made a name for themselves by the excellence of their work, which includes the High Schools at Hasan Abdál and Kahúta, the Ráwalpindi Water Works, and the Josephine Hospital at Hazro, he desired to acquire land. But the Land Alienation Act was a formidable barrier. He fought and won a suit against the Secretary of State: and though the local authorities desired to appeal, the Financial Commissioner accepted the decision of the first court. Thus the family became recognized officially as Janjera Rájpúts of Agra. This was in 1925 when all "Rájpúts" were agricultural tribes. It took the Deputy Commissioner some time to persuade higher authority that the only way out of the *impasse* was to notify all the agricultural sections of Rájpúts in the district separately. But in the meantime the new "Thákur" Tola Rám Singh succeeded in acquiring very considerable landed estates.

Maliárs.

Of agricultural tribes who occupy an inferior social position, the most important is the Maliár. They amount to eight per cent. of the total population in which they bulk as largely as Patháns. Every tahsil is full of them, but they are most numerous in Attock Tahsil. In all circles they own land in full proprietary rights and also cultivate for others; in the Attock Nála they own four whole villages. But it is not as proprietors, but as cultivators that they are important. In Attock though owning only 2 per cent. of the tahsil area, they cultivate 10 per cent., and there is the same disparity elsewhere. As cultivators they are unsurpassed, and are particularly successful on well lands. More than half the well-irrigated lands of the district are in their hands. If farming of a particularly excellent character is met with on a well, the cultivator is sure to be a Maliár. They excel in raising garden produce, tobacco and sugarcane. Unlike the ordinary *zamindars* they have not the feeling that it is shameful to sell vegetables, and Maliár women may be seen selling the

Maliárs—concld.

produce of their wells in all the towns and large villages of the district. They cultivate *barani* lands to any extent only in Attock Tahsil, where they are as successful as on well-lands, as the village of Losar Sharfú bears witness. They are distinguished for success as agriculturists, for thrift, industry and business-like habits, and for nothing else. As a tribe they have no headmen, no history, and no close tribal organisation. With the Arains and Bághbáns of the central and south-western Punjab they have no connection. The name "Maliár" appears to denote the occupation of the holder rather than the caste to which he belongs or the tribe from which he originally sprang. There can be no doubt that many of the present day Maliárs are descended from an ancestor of some other tribe who took to market-gardening as an occupation. Ranking first as cultivators, they rank lowest in the social scale of all agricultural tribes. They are fond of calling themselves by the name of some other tribe higher in the social scale, and at census many returned themselves as Awán, Janjua or Bhatti Rájpút.

Gujars.

Gujars, who are an important element in the agricultural population, are not found in the Tallagang and Pindigheb Tahsils. In Attock Tahsil they number between six and seven per cent. of the total population, own about thirteen per cent. of the cultivated area, and pay approximately 12 per cent. of the revenue. They are found in every circle, but are most numerous in the Nála, fairly numerous in the Sarwála, and only occasionally in the Chhachh. They own three villages in the Chhachh and seven small villages in the Sarwála: but the chief Gujar settlement is in the Nála, where they own 23 villages in the north-east corner under Gandgarh, along the Hazára border and on the Haro in Panjkatha. In Fatehjang Tahsil they own 15 villages, are found in different parts of the tahsil, and own a small block of villages in the extreme south-west corner of the Sil-Soan circle. The most interesting point about the distribution of the Gujars is that they are not, even as tenants, found in the purely Awán portions of the district. Their numbers have slightly decreased since 1907.

As in the case of the Awáns, so with Gujars: little or nothing is really known of their origin. Cunningham would trace their descent from the Yuechi Scythians who invaded North-West India in the first centuries before and after Christ. Ibbetson dismisses the theory of aboriginal descent, which "is to my mind conclusively negatived by his cast of countenance", but thinks that "throughout the Salt Range tract, and probably under the eastern hills also, they are the oldest inhabitants among the tribes now settled there." The tribal tradition is that they are by

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CHAP. I, C. Population. Gujars—*contd.*

origin Rájpúts of Hindustán who in some distant age migrated to Gujrát, which they found a good place for their cattle, and settled down under the Waraich Jats, to whom they paid revenue. In Akbar's time they migrated from Gujrát to this district. Whatever their original home, they still retain their peculiar dialect, apparently a dialect of Hindi betokening a southern origin, and they almost certainly came through Gujrát which the strong tradition regards as their home, just as the Bhattís look back to Bhattiána. As for their connection with this district, the date of their arrival is hidden in obscurity, but it is beyond question that they are among the oldest inhabitants. Bábar mentions them as cultivators in his time. Never suited for dominion they first came under the rule of Janjuas, who allowed them to continue in possession of their small patches of cultivation and the wide wastes over which they grazed their cattle. Their next masters were the Awáns who drove them from a great part of the district, if they did not absorb them into their own tribe. In the succeeding generations they cultivated such land as they were able to retain in subjection to the various tribes who held sway, playing no part in the politics of the district, never able to rise to any importance, and looked upon with something akin to contempt by their more powerful neighbours.

Gujars appear to be a true homogeneous tribe constituted by agnatic relationship alone. The name is said to be merely *gau chár*, or cattle grazier, and the derivation has this to support it that the Gujars were originally graziers rather than cultivators, and still are so in many districts. Even in this district, where they have for many years devoted themselves to agriculture, they still retain traces of their former occupation, and keep milch-kine and buffaloes for profit more than any other tribe. It is said that their women may often be seen with veiled faces weeping over the death of a milch buffalo, and that the mourning on that occasion is second only to that when a member of the household dies. But the adoption of a grazier's life does not confer Gujar status or admit to the tribe. The tribe keeps very much to itself, and there is no evidence of heterogeneity.

It is remarkable how much Gujars are disliked and despised by other tribes. Though good cultivators and often well off, they seem to be looked upon as little better than menials, and the appointment of a Gujar to any place of authority over any other tribe is always the signal for disturbance. Generally they are fairly well off. There are a few large proprietors, but most of the landowners are small men, cultivating their own holdings. As landlords they are good administrators, and look carefully after

Gujars—*concld.*

their property. As cultivators they are among the best in the district. Their villages in the Attock Panjkatha, irrigated by the Haro, are well farmed.

In physique they are of the same type as the Jat, whom in many ways they much resemble. Their proneness to quarrelling and intriguing are blots on their character, but not much more evil can be said of them. They differ widely in character from the idle, thievish and cowardly Gujars of the southern Punjab. Though not blessed with many attractive qualities, they are quiet, industrious, and unassuming. Previous to the War the army was closed to them: and this was a grievance. Many did excellently in the War: and the grievance has disappeared.

Their chief families are in Bhalot and Hissár.

Játs.

The Játs play a very inconspicuous part in district politics. They number close on twelve thousand, and are found only in Pindigheb and Fatehjang Tahsils. But there is no Jat tribe of common descent and with common traditions. The word "Jat" seems to include all who live by agriculture, but have not the courage to claim Rájpút ancestry, and are not Gakkhars, Mughals, Khattars, Awáns or Gujars. It is not clear when they came into this district or whence; though it is certain that they are all converted Hindus, and must have come originally from the east, if they are not aboriginal tribes or their descendants. It need hardly be said that, physically and in appearance, no difference can be discerned between the ordinary Rájpút and the ordinary Jat. No doubt the original Jat stock has received many accretions from other tribes in the district, who in the course of generations have lost touch with their original connections, and have become merged in the great body of the cultivators. Indeed, according to one theory, the original stock itself was formed in this way. The Ját is a cultivator pure and simple, usually a tenant. The earliest mention of him dates from the time of Bábar. The Jat then divided the cultivating occupancy of most of the district with the Gujar. From the Awánkari he was displaced by the Awáns, who themselves cultivated the lands they had acquired. To the present day the Ját is very seldom met with in the Awán villages. He appears wherever the land is owned by aristocratic tribes, who do not themselves hold the plough. No explanation can be offered of his absence from Attock Tahsil, where 70 per cent. of the land is held by tenants. In that tahsil there are fewer Rájpúts than in any other part of the district, and it is not possible that the Játs have recorded themselves as Rájpúts. It is equally unlikely that they have been absorbed by the other tribes, Patháns, Khattars, Awáns, Gujars, Maliárs and Sheikhs.

CHAP. I, C. — Population. — Játs—concld.

They abound in the adjoining Tahsil of Rávalpindi. The Játs have never taken any share in the history of the district. A few are *kabza maliks* or full proprietors in the villages where the Pindigheb Maliks have seignorial rights, but nowhere do they form a large community, and they own no whole villages. There are no men of note among them and as a body they are of little importance. In social position the Ját is at the bottom of the agriculturist's scale. As a cultivator he is excellent, being surpassed only by the Maliárs and equalled only by the Gujars. Generally Játs are well-behaved. Their physique is good or fair, and they do not want spirit.

Sayyads.

Sayyads are much the same as Sayyads in other districts. They are revered as descendants of the Prophet, but a great many so-called Sayyads have no real claim to Sayyad origin. The descendant of a member of an agricultural tribe, who has acquired a reputation for sanctity, sooner or later claims Sayyad origin, and in the course of time such claims are generally allowed. The process can be seen going on at the present day in more than one place.

Sayyads are scattered throughout every tahsil, and make up about 2½ per cent. of the total population. They are most numerous in Attock, where they own eight villages. Seven villages in Fetehjang, five in Pindigheb, and two in Tallagang are held by Sayyad owners. Fortunately their villages are usually small. Many of them cultivate their own land, but they are the worst possible agriculturists. The common Sayyad who has to till his own holding, is usually a most worthless individual; lazy, querulous, quarrelsome and a very inefficient cultivator. They are almost all in debt, and have alienated most of their land. But the Sayyad of better class who retains his circle of *muríds* is usually a man of quite different stamp and is very influential with the Musalman population and the tribes of the highest rank. Families high in the social scale are always ready to give their daughters in marriage to a Sayyad.

In Tallagang Pir Wiláyat Sháh, and his nephew Aurangzeb Sháh of Danda Shah Bilával are useful men of good standing.

The Pír of Makhad occupies a peculiar position. The shrine is to the memory of Pír Núri Sháh Badsháh Gilání, an historic figure that links with the line of the Naqíb of Baghdad. The shrine is much reverenced by Muhammadans of the Attock, Kohát and Pesháwar districts and also by Patháns across the border, including many Native Officers and men in the Army. There

are four large meetings held at the shrine each year. Pír Ghulám Abbás constructed a mosque and school: and endeavoured to obtain an enormous grant of land for its maintenance. CHAP. I, C. — Population.

Pír Ghulám Abbás stood by Government loyally throughout the War and exercised his influence at a time when hostility or even luke-warmness might have affected recruiting adversely. He received presents and testimonials from the highest in the land: but whatever appreciation he received, he was eager for more, especially in tangible form. His enemies accused him of wringing land from his disciples: and his accretion of wealth, and the methods and policy he pursued brought him into conflict with the family of the Khán of Makhad. In 1923-24 he fell foul of the local authorities: but was acquitted of the criminal charge brought against him. He died in 1929 and was succeeded by his son Pír Lál Bádhsáh, a young man of good education and promise. Sayyads—*concld.*

Koreshís resemble Sayyads, but are even more heterogeneous. If the door of Sayyad descent can be forced that of Koreshí descent is ever open, and he may enter who will. Koreshís number only a thousand or so and rank much below Sayyads. None have been returned from Attock Tahsil, but they are sprinkled about Fatehjang and Pindigheb. Koreshís.

Biloch and Gakkhar elements in the district are unimportant and do not require discussion. Gakkhar rule never extended west beyond the Margalla pass and only touched the eastern fringe of Fatehjang Tahsil, where a few members of the tribe are still to be found. Bilochis and Gakkhars.

With the exception of Mughals the remaining tribes notified under the Land Alienation Act, the Jodh, Kahút, Mair and Manhas tribes, are found mainly in the Tallagang Tahsil. They are found only in small numbers, stragglers from their homes in the Chakwál Tahsil of Jhelum. They were not found to be numerous enough for separate mention in the census lists. The Jodhs are probably merely a branch of the Janjuas, and may be the Juds of Bábar. For a detailed account of the other tribes reference must be made to the Jhelum Gazetteer. The Kahúts own two villages on the Chakwál border. They claim to have come from Arabia and profess themselves of Koreshí origin. Another account is that they came from Jammu giving their name to the Kahúta Tahsil of Ráwalpindi on the way. But they appear to be of Hindu origin. Their social position is not high. Jodh, Kahút, Mair, Manhas.

The Mairs and Manhas, who may be the same tribe, own one village in Tallagang on the Chakwál border. They claim Rájpút

CHAP. I. C.

Population.

Jodh, etc.—concld.

origin, with some show of reason, and state that they came from the Jammu hills. They bear a bad reputation for passion, revenge, jealousy, improvidence and recklessness, but are good cultivators. They rank slightly above Kahúts.

Paráchas.

Of the miscellaneous Muhammadan tribes the most curious is the Parácha. They differ completely from the Paráchas, or Muhammadan pedlars, who are found in scattered communities in the Central Punjab. They are Khatri converts to Islam, although their Ráwalpindi brethren, who hold a good deal of land, have been heard to claim Awán or Mughal origin in order to obtain the benefit of the Land Alienation Act. In this district they are a true caste, marrying only among themselves, and collected in two settlements at Makhad and Attock.

The biggest firm in Attock is that of Haji Abdul Majíd Sawál, whose dealings are world wide. In Makhad the best known man is Haji Núr Muhammad, a well travelled interesting conversationist. They hold no land, and are a race of traders, whose transactions extend to Turkistán and the cities of Central Asia. They deal in cloths, silk, indigo and tea, and are said to derive their name from *párcha* "cloth," one of the staples of their trade. Another derivation is from *farrash*, a carpet, as they used to bring carpets back from Central Asia. Their own story is that their original home was the village of Dangot in Bannu, and that they moved to Makhad in the reign of Sháh Jehán, but another account describes them as Khatris of Lahore deported by Zamán Sháh.

Mughals.

Both these tribes are very miscellaneous classes. It is not possible to say to what extent those who claim to be Mughals really are so, but it is probable that the true Mughals of the district are few in number. Such as there are, are descended from small Mughal settlements left by the various invading Mughal armies, and in consequence are found chiefly in Attock Tahsil. Elsewhere the Mughals, and they are found in all tahsils, may have little real claim to the name. The reputation of the Mughals as a whole suffers from the fashion among men of low origin who have risen in the world, of selecting the name of this race to cover their real extraction. The tendency has received a fillip since the tribe was notified under the Alienation Act. But it is a curious fact that certain tribes, even of high social rank, have begun to call themselves Mughals. The Ghebasand others do so.

If the Ghebas are excluded, Mughals hold land of a quantity more than inconsiderable only in Attock Tahsil. They own one

village in the Sarwála and two in the Chhachh ilaqa. They are apt to be exceedingly conceited about their origin, and are poor cultivators.

Shaikhs. Shaikhs are usually comparatively recent converts from Hinduism, and accordingly contain many very varying elements. Their numbers have fallen almost 50 per cent. since the census of 1891, and they now number less than four thousand. They are found almost solely in Attock Tahsil, and own ten villages on the sandy upland running from Campbellpur to the edge of the Chhachh. In the Sarwála they own 10 per cent. of the cultivated area, and pay 12 per cent. of the revenue. In the Chhachh they are responsible for 4 per cent. of the revenue and hold 3·3 per cent. of the land. In the Attock Nála there are only half a dozen Shaikh owners. The Shaikhs of Tagall and Saman represent the old kanungo families. The majority are in Government service, or have relatives so situated. They are good cultivators or careful managers, and in Chhachh largely cultivate their own lands. Their social position is not high, and they have lost much by their litigations. They are divided into two parties. Of the Wilayati party, Shaikh Ahmed Khán, Shaikh Fateh Khán, and their other brothers have set a fine example in constructing at their own expense a local dispensary, and a delightful Child Welfare centre, in recognition of the work done to regenerate the Chel area and to bring health and happiness to the children. The buildings cost about Rs. 20,000. It is for local authority to supply staff.

THE HINDUS.

Hindus, who make up 8·5 per cent. of the total population, are, by caste and in order of numerical importance, Khatrís, Arorás, Brahmans and Muhiáls. The three first divide between them almost the whole trade and money-lending business of the district, the exception being the Parâchas, the Khojás and a few Shaikhs, who are looked on with contempt by their fellow Musalmans. With the exception of the Muhiáls and a few Jagirdars and faqirs, and those in Government service, and lawyers, all the Hindus live by trade and money-lending. They are to be found in all the towns and larger villages. The smaller villages contain only one or two petty shopkeepers. A few acquired land in Sikh times, and are proud of their position as hereditary owners. But the great proportion of Hindu interest in land has been acquired by sale or mortgage.

More thrifty, patient and far-seeing than the Muhammadan peasant they have succeeded, often as the result of accumulated nterest on small original debts, in getting possession of a large

CHAP. I, C.

Population.

Hindus—*contd.*

proportion of the land. Their hold is strongest in Tallagang, among the Awáns and Khattars of Pindigheb, and in the Attock Nála. They do not themselves cultivate, and are with few exceptions harsh and exacting landlords. In the Awán tract money-lenders are found ruling the villages, raising the old customary rents, taking a share of the straw, breaking up grazing lands, exacting enormous usury, and attaching the plough cattle and selling the houses of their debtors. It is curious to note how little progress Sikhism has made among the Hindu population. In the adjoining District of Ráwalpindi the proportion of Sikhs among the Khatri population is three times that in the purely Sikh districts of the Punjab. But in this district, perhaps because Sikh dominion was at any time little more than nominal, few Hindus have taken the *pahul*. Sikh Khatris are found practically only in the Fatehjang Soan and round Gandakas in the south-east of Pindigheb. No class has benefitted to such an extent from the British rule as the Hindus. More ready than the agriculturists to avail themselves of the opportunities now offered for the education of their children, they have obtained a very large share of the appointments under Government in most departments.

Khatris.

Khatris, who number about 24,000, make up the greater portion of the Hindu population. They are the most valuable element in the Hindu population. The most versatile of all the Hindus and with plenty of spirit they turn their hand to anything except agriculture; much of the trade of the district is in their hands and many of them are in Government employment. Several have risen to high rank in the army, while in civil appointments they provide some of the best public servants we have. In Tallagang the Chháchhi Sardárs, whose ancestors held the tract under the Sikhs, are large Jagirdars, but reside almost always in the Gujránwála district, and have really little to do with Tallagang.

Aroras.

Aroras number a little over twelve thousand, and are found in all tahsils but especially in Attock. Very few are Sikhs even in name. They are below the other Hindus in the social scale, and confine themselves to trading and money-lending. They have the reputation of being more grasping and unscrupulous money-lenders than the Khatris, and are in consequence more disliked and despised.

Brahmans.

Brahmans, who number only a little over two thousand, are found in all tahsils but especially in Attock and Pindigheb. They own one village in Tallagang, one village in Attock, a share of a

Brahmans—*concld.*

single village in the Fatehjang Sil Soan, and a few plots of land in Pindigheb Tahsil, but with these exceptions are not agriculturists. Everywhere they go in for money-lending.

Muhiáls.

The only other prominent Hindu caste in the district is the Muhiáls. In the whole Province they number only about eleven thousand, and about ten per cent. of them are in this district. Their principal habitat is the Jhelum District, and in consequence they are more numerous in the southern tahsil of this district than north of the Kála Chitta. But they inhabit no well-defined tract, living in scattered villages throughout the lower tahsil. Their own account of themselves is as follows :—

Among Brahmans, Muhiáls require special notice. They are distributed in almost all the principal towns and villages in the district, and amount to a good number. They are looked upon with peculiar respect. By origin they are a branch of the Sársut Brahmans, but their ancestors before the time of Mahábháratha renounced the priestly office, and devoted themselves to administration and military service, and began to cultivate land. Many of them are hereditary owners of land.

They are divided into seven clans, Datt, Vaid, Báli, Chhibbar, Mohan, Lau and Bhimwál, which are descended from seven Rishis. Drona Charj, the military tutor of the Pándavás, was an elder of the Datt clan.

The Muhiáls eat together and intermarry without scruple, but they look down on other Brahmans, and will not eat or intermarry with them ; occasionally a Muhiál takes to wife the daughter of a respectable Brahman, but the offspring is looked down upon, while a Muhiál who gives his daughter in marriage to a Brahman, is punished by exclusion from the caste.

They are a fine looking, intelligent race, remarkable for their loyalty, pluck, enterprise, devotion to duty and military spirit ; they principally employ themselves as agriculturists, and eagerly take military service. They make fine soldiers, and rise to respectable positions in the Civil Department, but they are essentially a military race.

They specially reprobate three things—the taking of charity, the handling of scales (Bania's work), and living a life of laziness. They employ the titles of Bakhshi, Mehta, Raizáda and Dewán."

A somewhat fuller account will be found in the Jhelum Gazetteer. Numerically and as agriculturists of this district unimportant, they are a stirring and enterprising race, and frequently rise to prominence in the civil or military service of Government. They admit Brahman origin, but strongly object to

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Population.

Muhiáls—*concld.*

being classed with that caste or being addressed by Brahman titles. They are notorious for the way in which they hang together, one caste brother being always ready to assist another. The leaders of the caste are endeavouring to develop a spirit of unity between the various clans by encouraging intermarriage and by editing a caste newspaper.

ARTISANS AND MENIALS.

Mention has already been made (page 79) of the chief artisan and menial castes. Social importance depends on the materials handled and the habits of the caste. The two tests are not always distinct, but the higher castes take rank according to the nature of the employment, and the lower castes partly according to the nature of the food eaten. The metal and wood workers rank above the workers in clay. Workers in gold and silver rank highest of all. The Lohár ranks slightly above the Tarkhán, when any distinction is made. Workers in leather come lower still. The Mirásís rank low, because they eat any one's leavings. Lowest of all are the scavengers. Nearly all the agricultural menials receive in payment a share of the produce, others are paid by piece-work.

Sunárás.

The Sunárás or Zargars are the workers in gold and silver. They are chiefly found in the towns and larger villages, and are equally distributed between the four tahsils, though their numbers are nowhere large. They are mostly Hindus, though a very few are Sikhs. Many of them advance money at interest on the security of ornaments. Though they have the same reputation for dishonesty as elsewhere, they are socially the highest of the artisans.

Lohárs and Tarkháns.

The Lohárs are the blacksmiths and workers in iron. The Tarkháns do all the carpentry work, making agricultural implements, and the woodwork of wells, etc. They are also the bricklayers of wells and of buildings of burnt brick. Both are Musalmans, and both are everywhere regular agricultural menials receiving customary payments in kind. The two castes intermarry. In Tallagang and Pindigheb blacksmith's and carpenter's work is usually done by the same man, and there is not the same clear distinction between Lohár and Tarkhán as elsewhere. The Lohár ranks slightly higher in the social scale, and in consequence in these two tahsils the numbers of artisans who have returned themselves as Tarkhán are very small. Generally all menial castes are Muhammadans.

Kumhárs.

The Kumhárs are the potters, make bricks and clay vessels, and receive a customary share of the produce for furnishing the

pots for well wheels and the earthenware for domestic use. They rank low socially because they burn all kinds of refuse in their kilns, and because they keep donkeys.

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Population.

Kumhárs—*concld.*

Juláhás.

Juláhás, who are commonly called Páolis, are found in all tahsils. They are weavers, and are paid by the piece. The same trade is followed by the Kashmíris, who are found chiefly in Attock Tahsil, and to some extent in Fatehjang. Whatever connection the Kashmíri may have or acquire with the land, sooner or later he takes to his hereditary occupation at the loom. Weavers are an ill-conditioned turbulent class.

Náis.

The Nái is paid in kind in the villages and has curious functions. He is the barber, the leech and the go-between. He performs circumcisions, and is the recognized messenger on all occasions of domestic occurrences. He takes a prominent part in arranging marriages and in the actual ceremonies, and carries tidings of births and deaths. On these special occasions he is addressed as Rája. The Nái, with his intimate acquaintance with each household, is the village gossip. Still his social position is low.

Telis.

The Teli is the oil-presser and is found in the villages, taramira being everywhere grown. In towns the Kasáis or butchers, a trade guild rather than a tribe, are his relations.

Jhínwars.

Jhínwars, whose primary occupation is water-carrying, are not found in Tallagang. The people themselves do their own water-carrying, and the Jhínwars bake and parch corn. His wife is often a midwife or wet nurse.

Mallahs.

The Mallahs are boatmen on the river, and sometimes also fish.

Dhobís.

The Dhobís are washermen. They deal with dirty clothes, and so are an impure caste. They too keep donkeys. To this class generally belong the Liláris or dyers, and the Darzís or tailors.

Mirásís.

The Mirásís are the bards, musicians, genealogists and buffoons. They rank above Mochís and Musallís alone. They are called in to amuse the people at marriages, and their services are in request at all domestic functions.

Mochís.

The Mochís are the workers in leather. They tan skins and make shoes and other leather work. They are looked down upon because they handle hides.

Musallís.

The Musallís are the lowest of all the menials. They were all returned as Chúhrás at the census of 1891, but there are in reality no Chúhrás in the district. The Musallís are the Muhammadan

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Population.

Musallis—*concld.*

scavengers. They are converted Chúhrás. Besides scavenging they make baskets and winnowing trays and work in raw hide. They also assist in harvesting, and receive customary dues. Here, as elsewhere, conversion to Islam has somewhat raised the status of the sweeper. He no longer eats carrion or food forbidden by Muhammadan law.

TRIBAL ORGANIZATION.

The foregoing account of the various tribes should have made it clear that there is no single rule of tribal organization. To dispose of the castes as distinguished from the tribes, it is necessary to say only that the Hindus and the artisans and menials have no large joint communities but are scattered over the district, and are held together only by the rules of intermarriage. The agricultural tribes are of two classes. The aristocratic tribes, such as Jodhrás, Ghebas, etc., are a collection of inter-related families. Each family has its chief or chiefs, among whom, although all are at strife, one is generally recognized as the head of the whole family. Similarly the families, whatever the bonds may be, are ranged in a well recognized order of seniority, the head of the senior family being the head of the whole tribe. This arrangement is complicated by differences in prosperity and personal force of character, but the position of the senior member of the senior family is always recognized. The other tribes are constituted by a real or fictitious relationship of common agnatic descent. They are broken up into septs and clans of varying social importance, but in general, apart from wealth and ability, each member of the tribe is as good as another. It is no part of the tribal organization that any family should overtop the rest of the tribe or clan, and no actual authority is recognized by the tribe as vested in any of the chief men. Remove the big Awán families and the tribal organization would be little affected. Uproot the big Jodhra families and the tribe would wither away. The Khattars are intermediate between these two classes, but partake more of the character of the former than of the latter. Historically, the effect of this distinction between tribes has been very marked. The tribes constituted by families settled as dominant non-cultivating seigneurs. The clan-tribes came to the district as colonists and drove out the previous occupants. The former tribes had an organization that forbade the admission of strangers. The doors of the latter were ever open. Even Awáns and Gujars have probably an element of heterogeneity in their composition. The débris of older tribes and wandering excommunicated men cannot all have found their way into the conglomeration called Játs, so small a body in this district. They

must have entered one or other of the tribes, who did not test too severely the claims of an application to membership of the tribe. When the question was whether a stranger was a member of the family or not, there can have been little hesitation in deciding, but in the case of a clan or a sept it must have been easier to assert than to disprove a right of inclusion. All the tribes are very much more particular about the rank of the tribe to which they give their daughters, than about the rank of those from whom they take their own wives. The custom throughout is for each tribe to give its daughters only to those whom it looks upon as of superior or at least of equal rank, but it will generally take a wife from a tribe which it holds to be slightly inferior to itself in the social scale, but of the same class. The marriage relations are roughly as follows :—

Sayyads do not give their daughters in marriage to any but Sayyads, and only take women in marriage from tribes of the highest rank, Gakkhars, Janjuás, and so on ; Koreshís also only give their daughters to men of their own tribe. Mughals give their daughters to men of their own tribe, to Jodhrás, Chohâns and Awáns. Patháns give their daughters only to Patháns or Sayyads. Awáns give their daughters to men of their own tribe, to Sayyads or to Patháns, seldom to Khattars. Khattars give their daughters outside their own tribe, only to Patháns, Sayyads or Gakkhars. Alpiáls give their daughters to Ghebás, Awáns and Sensrál Rájpúts. Ghebás give their daughters, outside their own tribe, to Khattars, Alpiáls, Sayyads and Sensráls. Jodhrás and Chohâns only give their daughters, outside their own circle, to Khattars, Mughals and Awáns.

Paráchás only give their daughters to Sayyads and Paráchás.

Gakkhars only give their daughters to Sayyads outside their own tribe. Gujars only give their daughters to Sayyads ; but Gujars, of all the various *gots* or branches, intermarry with each other.

Khatris, Brahmans and Aroras marry only within the caste with the usual *got* restrictions. All the Muhiál clans intermarry.

At wedding feasts and at funerals, all neighbours and friends, without distinction of class or religion, assemble, more particularly at funerals. Personal friendships are formed also quite independently of social status or of religion, and friendship is a virtue held in high esteem in this district. Musalmáns do not go to the funeral pyre with Hindús, but on all other occasions the people of this district, Hindú and Musalmán, mix very freely together. Among Musalmáns all are allowed to eat together, with the exception that others will not eat with sweepers.

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The Hindus, as elsewhere, have much more stringent rules on this point, but none of them are peculiar to this district.

DESCENT OF JAGIR ACT.

The provisions of the Descent of Jagir Act have been accepted by Khán Bahádur Malik Muhammad Amín Khán, Khán Bahádur Nawáb Ghulám Muhammad Khán, Khán Sher Muhammad Khán of Makhad, Lieutenant Sardar Muhammad Nawáz Khán of Kot Fateh Khán, the late Sardar Dost Muhammad Khán of Bahtar and Sardar Mehr Singh Chhâchhi, Jagirdar of Dhadhumber.

RELIGIONS.

Ninety per cent. of the population is Muhammadan: the remainder with the exception of less than 1,000 Christians, being Hindus and Sikhs in roughly equal proportions. Of the agriculturists 95 per cent. are Muhammadans.

Muhammadans.

Islám is the principal religion. With the exception of a few scattered Shias all its followers are Sunnís. They practice circumcision, repeat the *Kalima* or profession of faith, marry by *Nikah*, bury their dead, and regard Mecca and Medína as holy places of pilgrimage. The pious pray regularly in the mosques, keep the fast in Ramzán, and give away part of their income in charity, but the ordinary agriculturist is very lax in these observances, and is ignorant of the tenets and principles of the religion which he claims to profess. The people are, however, thoroughly convinced of the truth of their own creed, though they are by no means intolerant or fanatical. There is nothing peculiar about the Muhammadanism of the district. There are the usual beliefs in recording angels and in an after life where the good will be rewarded in a Paradise of Houris, and the bad punished in a Hell of everlasting fire. Belief may have little effect on normal conduct, of which the social sanction is the most powerful regulator, but it is of great value in argument; and a quotation from the Korán will often decide a controversy. Falsehood and perjury are not regarded as very sinful. An oath on the Korán made at a holy shrine is generally respected, but there are some classes of the population to be bound only by the "oath of divorce," the most binding oath of all. By taking this oath, the witness sometimes incurs the displeasure of the brotherhood, and it should never, therefore, be imposed on those unwilling to submit to it; it is not often volunteered. The Shias in popular opinion are distinguished from the Sunnís only by differences in ritual. Thus, the Sunni prays with his hands folded on the waist, the Shia with his hands by his sides. Shias are said to be chiefly Sayyads. They are numerous in Tallagang, Patwali and Dhaular in Tallagang. A few Mochís in Pindigheb

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Population.

Muhammadans—concld.

are Shias, and a few are to be found in the Narrára ilaqa and in Makhad. There are also one or two in Attock Tahsil. Apart from differences in ritual the chief difference from the Sunnís is that the Shias observe the first ten days of the Muharram as a fast in commemoration of the martyrdom of Ali and his sons, Hasan and Hussain, and make processions with *táziás* resembling the tombs of the latter, with loud lamentation and mourning.

Hindus.

There are few peculiar Hindu sects to be found in the district, and there are no special peculiarities of religious belief to be noted. Hindu worship centres round incarnations of Vishnu, chiefly Rama and Krishna. The educated explain away the idol-worship in various ways. The uneducated are content to seek no explanation. The Hinduism now in the district is of a very lax form. Veneration for the cow is still very strong, and the shades of ancestors are still propitiated for three generations by expiators' offerings and gifts to the Brahmans. But the belief in the efficacy of gifts to Brahmans is gradually weakening, and recourse is now had to medical treatment in cases where in former days the Brahman would have been called in to recite *mantras*.

Sikhs.

In 1907, it was written "Sikhism has made very little progress in the district," and the figures of each census from 1881 onwards bore this out. There were 3,812 all told in 1881, 5,512 in 1891, 6,991 in 1901. But in the next decade they leaped up to 26,914.

The census of 1921 curiously showed a decline to 19,791.

The first increase was probably due to the system of enumeration : regarding which the authors of the Census Report (Census 1921) wrote as follows :—

It is very difficult to define Sikhism because it is not sharply divided from Hinduism as regards religious beliefs. The Sikhs, like the Hindús, believe in the transmigration of the soul, the law of Karma, and in the three modes of attaining union with the Supreme Being. The faith owes its origin to Gurú Nának, who flourished in the latter half of the 15th century of the Christian Era. Gurú Nának preached that there is only one true God, he condemned idol worship, proclaimed the futility of pilgrimages, and declared that the path to salvation lies through good deeds combined with devotion to the Supreme Being. Thus Gurú Nának strove, not to found a separate religion as a revolt from Hinduism, but to reconcile the ancient beliefs with the purer creed. Sikhism continued to exist as a pacific cult till about the end of the seventeenth century when the political tyranny of the Musalmans, and the social tyranny of the Hindus converted it into a militant creed.

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Population.

Sikhs—*contd.*

The momentous change was accomplished under the direction of Gurú Govind Singh, the tenth and the last of Gurús. His teachings did not effect any material change in the Sikh creed so far as religious principles were concerned, but he tried to organise the Sikhs into a separate nation, and with this object ordained on them the observance of certain rules of conduct, and insisted on a definite ceremony of initiation (*pahul*). The Sikh believer was required, besides accepting the religious doctrines of the earlier Gurús to wear long hair and refrain from smoking. These two distinguishing features were taken as a standard for judging between Hindús and Sikhs at the census of 1891. The rule was retained at the census of 1901.

The difficulties experienced in the practical application of the definition led to its modification in 1911. In 1911 the statement of the persons enumerated regarding religion was accepted without question. The same rule was repeated at the present census because the term "Sikh" includes not only those who follow the ordinances of Gurú Govind Singh, *i.e.*, Kesdháries, but also Sahjdháris. Both sections accept the tenets held by the Gurús and embodied in the Granth, and being strict monotheists repudiate the authority of the Vedás.

Whether the census of 1931 will reveal an increase in numbers or not: there can be no question but that there has been a very real increase in fervour. Interest centres round the Panja Sáhib at Hassan Abdál (*vide* "Places of Interest"): but the Akali movement and the Gurdwáras Act have also stimulated existing Sikhs not only to claim what was fairly theirs, but also to attempt (doubtless in good faith) to obtain that which never had been theirs, and to proselytise. The old Mahant at the Panja Sáhib was evicted: on one occasion an attempt was made to obtain possession of land pertaining to the village shamilat, more or less by force, and on another to secure nazul land. Both attempts were defeated appropriately.

At Hassan Abdál there are an ancient mosque and the comparatively recent Panja Sáhib separated by a few yards only: and each community desired to be granted the intervening space. This has, however, been converted into a garden: and what used to be the rubbish dump of the Panja Sáhib's buildings is now a lawn.

In many Hindú shrines it was the practice to read the Granth Sáhib as one of the holy books: and all such shrines were considered, and the form of worship studied with a view to claiming them as Sikh Gurdwárás. The shrine at Kot Fateh Khán was one such. In Tallagang both in the town and in the villages of the tahsil Sikhs

have attained to considerable strength. Their accretions are at the expense of the Hindús, not the Muhammadans, but the expansion is much more rapid than in any other religious community. CHAP. I, C. Population. The Sikhs—contd.

The popular opinion is that Sikhism is adopted for economical reasons, the expenses at births, marriages and deaths being less than those incurred by Hindús.

The following account of the Kúkás is taken from the Gazetteer of Ráwalpindi District (1897) and refers to the Attock Tahsil :—

The Kúká sect owe their origin to a Sikh who resided in Hazro in the Attock Tahsil, in the time of Ranjít Singh. One Dal Singh, Arora of Hazro, had two sons, Bálik Singh and Mána Singh. There was at that time a Sikh fort in Pírdád, a village adjoining Hazro, and a Sikh official had his office in Hazro. The garrison of the fort and all the officials connected with Bánki Rái, the Sikh Civil Officer in charge at Hazro, got their supplies from Dal Singh's sons. Bhái Bálik Singh professed the Sikh religion, obtained the name of a wise and holy man, and became a teacher among the people. Many of the Sikh garrison of Pírdád became his disciples, and others from the neighbourhood also began to look up to him as their spiritual adviser and head. This garrison was moved down southwards, including in it one Rám Singh, belonging to a village in Ludhiána. He, too, was a disciple of Bálik Singh, and spread his doctrines wherever he went. After the Sikh power passed away Bálik Singh continued to teach at Hazro and built a place of reception there, where his disciples and friends assembled to hear him teach. He died at the age of 70 in 1863 and was buried at Hazro. Rám Singh returned to Hazro two years before the death of Bálik Singh and obtained his permission to instruct the people in his doctrines. Many joined the sect, and in time the Kúká outbreak took place in 1873. Rám Singh was arrested and sent to Rangoon. Bálik Singh left no son; his brother, Mána Singh, left two, of whom one, Khair Singh, has succeeded to Bálik Singh's position as apostle of the sect, of which it is now characteristic that its disciples are strictly enforced not to reveal the tenor of its teaching. The sect is not called Kúkás in Ráwalpindi, but Jagrási. In Siálkot they call themselves Nám-dhári : further south around Amritsar they have got the name of Kúkás, from their habit of reading their sacred books with great vehemence, wagging their heads the while, until they became unconscious of their actions when they commence shouting *kú kú kú,* whence the name Kúká. This sect recognise Guru Nának as the chief Sikh priest : further south the Kúkás are all followers of Gurú Govind Singh only. For an account of the Kúká Branch the Final Report of the Ludhiána District at pages 56 and The Kúká sect.

CHAP. I, C.

Population.

The Sikhs—*concld.*

57 may be consulted. The Jagrásis do not attempt to conceal that they belong to the sect, as the Settlement Officer of Ludhiána states is the case with the Kúkás.

Christians.

Practically the only Christians are the Europeans in Campbellpur and Attock. There are also a few native Christians in Government service.

There is a branch of the American Presbyterian Mission in Campbellpur : and libraries have been opened by them in Hazro and Fatehjang. At one time the whole of the staff at Josephine Hospital for Women in Hazro from and including the Lady Doctor in charge, were Indian Christians. But the numbers in the district as a whole are negligible.

Mosques and temples.

Every village has its mosque. In the large villages, specially if rent by faction, there may be two or more. Often the mosque is little more than an ordinary mud hut, distinguished by a couple of pinnacles or a pair of horns. Generally it is more pretentious, having a carved wooden door on front, a raised platform covered with the scented *khavri* grass, a *hummam* for heating water used in the ablutions before prayers, and a low mud wall encircling the courtyard. In the towns and large villages the building is often of masonry and is ornamented with stucco and painted scroll work.

Thákurdwárás, shiválás and *dharamsálás* are found only in the towns and in the large villages where there is a Hindu or Sikh community.

Ecclesiastical Administration.

There is a Church in Cantonments used by the Church of England, and Wesleyans : and another belonging to the Roman Catholics. There is a Chaplain's bungalow : but no Chaplain : the parish being visited, usually once a month, by the Clergy at Nowshera. The American United Presbyterian Mission propose to construct a Church : but the site is not yet settled.

Priests.

The mosque attendant is the Imám or Maulvi. His duties are to keep the place in order, to conduct services at marriages and funerals, and to keep the mosque school where a few boys are taught to repeat the Korán by rote. He is usually a superior head of village menials. In some villages he receives a share of the grain at harvest ; in others he holds a piece of land from the cultivated village waste or rent-free tenure. Few are men of any learning, and their influence over the people is small.

Holy men.

To a very large extent the religious emotions of the people centre round the numerous holy men and saints or their progeny. Some of these holy men have a real claim to the respect of the people. They are in general Sufis, and live a life of austerity and

CHAP. I, C.

Population.

Holy men—concld.

respectability. They are looked up to with the greatest reverence by the whole population, and are generally credited with miraculous powers. Their esoteric doctrines are communicated only to the circle of their closest pupils. To the *zamíndár* they are pattern of morality and mediators to whom special power and influence have been vouchsafed. The educated look on them as men to whom mysteries hidden from others have been revealed. When a saint who by austerity or the performance of a miracle has obtained a good report dies, his reputation usually descends to his shrine or to his descendants. The latter are revered as Miáns or Pírs. They have a hereditary sanctity, quite apart from the saintliness, or otherwise of their own conduct. Many of them have a wide circle of *muríds*, or disciples who delight to honour them and offer gifts. A Pír with a wide clientele will usually make tours, receive the homage and hospitality of his *muríds*, and collect offerings. In general, the land held by any of these holy men is freed from liability to pay revenue, the assessment being borne by the villagers who distribute it over their own holdings. It is not necessary that these holy men should belong to a holy caste, but descent facilitates for a Sayyad or Koreshi the acquisition of a reputation for sanctity. Among Sikhs similar offerings are made to Bedíes and Bháís, who come round periodically to collect them. It is not unusual to find the Muhammadan *zamíndárs* paying respect to Hindú and Sikh holy men. Many of the holy men have, at their headquarters, colleges of monks (*khalífás*) who are maintained from the revenues of the shrine or the offerings to the Pír.

The principal Pírs of the district are Wiláyat Sháh and other Sayyads of Danda Shah Biláwal, in Tallagang; and Pír Lál Bádsháh of Makhad. The shrine of Báwa (also claimed as Bhái) Than Singh at Kot in Fatehjang and the shrine at Malahi Tolah in Attock Tahsil are both well known.

SUPERSTITIONS.

Superstitions, General.

The people, Muhammadans as well as Hindús, but especially the latter, are intensely superstitious. The superstitions are often apparently inconsistent, nor do the same superstitions prevail in all parts of the district. These beliefs are exceedingly numerous and complex, and a complete account of them cannot be given.

Every one believes in *jins*, and with the *zamíndárs* and the ignorant Hindús the belief is a very real one. The harvest-heap of grain ready on the threshing floor for measurement and division, is surrounded by elaborate precautions to keep off the *jins*. A paper bearing the name of God is placed in the heap, and some iron implement is kept near. A line is drawn round the grain, within which no one may come with shod feet, and women not at all

CHAP. I, C.

Population.

Superstitions —concld.

(according to some because they are considered unclean, but others say because they attract the *jins*). Iron is thought to keep off evil spirits, a belief which Hindús say is derived from their religious books ; thus for some days before and after a marriage, both bride and bridegroom keep near them or carry about a knife or other iron implement. The Musalmáns have a similar custom at child-birth also. There are many tales of small children left alone in the house, or going out alone to the fields, dying owing to the influence of *jins*. Small whirlwinds or "dust devils" are thought to denote the presence of malignant spirits, and are therefore feared. No one will willingly pass by a graveyard or burning ground alone at nights. Those who have occasion to sleep alone in a graveyard, or in the enclosure of a *khángáh*, or shrine, must sleep on the ground. Instances are given of sceptical persons sleeping in such places on beds, and finding them overturned by spirits in the night. Lucky days, depending usually on the state of the moon, are recognized here as elsewhere. Some *zamíndárs* will not commence ploughing on Sundays or Tuesdays, others consider Tuesdays the best day, because Adam began to plough on that day ; they also consider Tuesdays and Saturdays the luckiest days for beginning legal proceedings of any kind. It is believed unlucky to start on a journey northwards on Tuesday or Wednesday. Mondays and Fridays are lucky days to commence such a journey. It is bad to start southwards on Thursday, good on Wednesday. "*Mangal Budh na jáeye pahár, jiti bázi deye hár.*" (Do not go northwards on Tuesday or Wednesday for if you succeed it will still end in loss) is the popular proverb on this subject.

You should not go east on Monday or Saturday, but should choose Sunday or Tuesday, if possible ; for journeys westward Sundays and Thursdays are bad, Mondays and Saturdays are good. On starting on a journey it is fortunate to meet some one carrying water, to meet a sweeper, a dog, a woman with a child, a Khatri, a maiden, all kinds of flowers, a *máli* (gardener), a donkey, a Rája, a horseman, a vessel of milk, curds, *ghi*, vegetables, sugar or a drum (*nakára*).

It is considered unlucky to meet a Brahman, a Mullán, a man with a bare head, any person weeping, smoking, fire, a crow flying towards one, a widowed woman, a broken vessel in a person's hand, a cat, a gardener with an empty basket, a goat or a cow or any black animal, a snake or an empty *gharrah* carried along. To hear the sound of crying or to hear a person sneeze while on a journey is most unfortunate. This last will almost always occasion at least a delay in a journey. It is not easy to give any satisfactory reason for these superstitions : meeting water

at starting is considered lucky, because water is much prized; sweepers are humble, honest and useful; dogs are faithful, and so on. Brahmans are seldom seen without their asking for something; Mulláhs are unlucky to meet for much the same reason.

It is considered very unlucky for a cow to calve in Bhádon, for a mare to drop a foal in Sáwan, a buffalo to calve in Mágh, a cat to have kittens in Jeth, a donkey to have a foal in Sáwan, a camel to have young in Baisákh, a goat to have a kid in Poh, or a dog to have pups in Chet. If any of these things happens in any household, the Brahman or Mullán is at once consulted as to what should be done, and the prescriptions always include a fee to the person consulted, in some shape or other. To hear a horse neighing in the daytime is unlucky. Hindús greatly dislike to have a child born in Katik.

Superstitions connected with agriculture are numberless. Some of them no doubt have a practical foundation, most of them have not. Thus camel bones or a dead snake burnt at the side of a cotton field are supposed to preserve the plants from blight.

The Hindús have many beliefs founded on astrology, which it is not necessary to detail. The supposed unluckiness of children born at noon, may perhaps have some connection with them. A child of one sex born after three children of the opposite sex (*trikkal*), portends misfortune to the parents, especially the parent of the opposite sex; but evil can be avoided by certain elaborate ceremonies; this is a Hindú belief. Amongst Hindús, the maternal uncle and his sister's son are supposed to be inimical; they must not sit together during a thunderstorm, and there are various other usages due to the same idea.

Charms and spells to ward off evil from, and to cure diseases of, men and cattle are commonly believed in, and are highly esteemed by both Muhammadans and Hindús. Healing powers are supposed to reside in the members of various families. The efficacy for all sorts of purposes of the small shrines (*khángáh*) which dot the country, generally tombs of holy men, is firmly believed in. When a villager desires anything very strongly he makes a vow (*mannat*) to present something at one of these shrines, commonly a rag tied to a tree above the tomb; or the offering has some reference to the wish that has been granted; one shrine is specially good for curing the bites of mad dogs; another gives the suppliant success in litigation; another is good for tooth-ache, and so on through a long list, though in general the shrines have no speciality of this kind, but are supposed to help those who come to them in whatever their need may be. The shrines are great tree preservers

CHAP. I. C. Population. Superstitions —*concld.*

as no one dares to cut down a tree or even carry away fallen wood from a *faqír's* grave. Living *faqírs* drive a brisk trade in charm and amulets to serve all sorts of purposes. There is a spring where barren women can become fruitful near Sháh Muhammadwálí, which was miraculously revealed to a pious boy, who was too good to live long afterwards. Pilgrims visit this from as far away as Kohát. Miracles have not ceased here as yet, and can even be performed to order, as one *faqír* offered to perform one for the special benefit of an officer employed in the district. Legends about saints and *faqírs* are numerous, but generally of the most common place and uninteresting character.

Only the Patháns of the district appear to care for none of these things.

Invocation of rain.

When rain fails for any considerable period, and the people are threatened with draught or famine, they proceed to invoke rain in some of the following ways :—

I. They take grain, collecting a little from each house and place it in a vessel of water and boil it, and then take it to a *khankáh*, or *masjid*, and after prayer divide it among all present, and in Attock they also pass round confectionary and sweet breads.

II. Men and women collect together and repair and clean up the *masjid* and pray there.

III. A boy is taken, and his face blackened and a stick put into his hand. He then collects all the other children, and they go round begging from every house and calling out—

Aulia ! Maulia ! Mính barsa,
Sádi kothí dáne pá ;
Chiriyán de munh páni pá ;

and whatever grain they collect they boil and divide.

IV. Men, women, boys and girls collect together and fill a *gharrah* with water, mud, cow-dung and similar things, and, choosing out the most quarrelsome person in the village, they fling this *gharrah* into his or her house ; upon this a violent quarrel immediately takes place. The idea being that the Almighty, seeing to what straits they are reduced, will send down rain.

V. Men and women fill *gharrahs* with water and take them and pour them over some holy person and bathe and wash him telling him to pray for rain.

VI. Boys and girls are collected together : two dolls are dressed up as a man and a woman, and they then all say, *Guddi*

gudda margia: and they then burn them with small sticks and lament their death saying:— CHAP. I, C. Population. Invocation of Rain—*contd.*

Guddi gudda sária
Was mián Kália;
Guddi gudda pittiá,
Was mián chittia;
Kále pathar chitte ror,
Baddal pia giranwen kol.

Which may be translated thus—

Dolls we burnt to ashes down,
Black cloud! soon come down.
Dolls well we bewailed,
Do, white rain! set in;
Stones black and pebbles white,
(Cloud rain) fell near village site.

This custom is a Hindú one.

VII. Several women of one village go to another and seize goats from their flocks. The women of that village come and fight with those taking the goats. If they do not succeed in rescuing the goats, they, too, take goats from another village. The stolen goats are then killed and eaten. This is supposed to show that the women are starving, and thus to appeal to the pity of the deity.

VIII. The common people get some person of high rank who has never put his hand to the plough to come and plough some land. It is said that on one occasion a former Deputy Commissioner was induced to put his hand to the plough, an action which was speedily followed by the fall of the desired rain!

Such a state of affairs is supposed to be indicated by this, that the deity must be moved thereby to send rain. Numerous instances are quoted in which such a proceeding on the part of men of high rank and station was effectual in bringing down rain from heaven.

IX. In Sikh villages, the Granthi reads prayers night and day until he has gone through the whole. Then confectionery is divided and presents are made to the readers, and a valuable cloth is placed on the Granth book.

CHAP. I, C.
Population.
Invocation of Rain—*concld.*

X. The Mullâns and others go to the *masjid* and call the *báng* seven times at each corner, and also go round the village calling the *báng*. Crowds of villagers assemble and repeat prayers. This is known as *nafal*. This is common in Tahsil Attock. Religious books are read and presents made to priests and shrines. A ploughshare's weight of grain is a common gift at such a time.

XI. There are two special forms of public prayer. "*Zari*" is when the population of a village turn out to pray for a common object.

XII. *Nafal* is a similar public litany at times of acute distress, *e.g.*, *nafal* prayers were read throughout the Chhachh when the Shyok trouble was threatening: and having confessed their sins and made their public prayer the people went on their way encouraged to face, as they did, with generous co-operation and mutual help the trouble when it came.

OCCUPATIONS.

Occupation. General.

The occupations of the people are given in Table XVII of the statistical volume, but that statement is somewhat indigestible. It will be sufficient to note briefly how the population is divided between the main heads :—

Agricultural	66	per cent. of the population.
Industrial	19	" " "
Commercial and professional	6	" " "
Administration	1	" " "
Independent	3	" " "
Personal Service ..	4	" " "
Others	1	" " "

The rural population is essentially agricultural or dependent upon the results of agriculture. Besides the agriculturists pure and simple, there is a very large body of the population which depends for its livelihood upon the yield of agricultural occupations. There are very few tribes which do not till their own lands. The proportions of the agricultural community which is above ploughing and sowing is very small, and even among Jodhrás and Ghebas, hard times and extravagance have driven

CHAP. I. C.

Population.

Occupations —contd.

the poorer owners to tilling their own lands. In the humbler tribes women work in the fields, assisting in most agricultural occupations except ploughing. Like the men of the tribe the Maliár women are the most industrious and do most field work.

The next census should reveal an increase in the number of persons affected by industry as a result of the expansion of the Wah Cement Works and the Khaur Oil Fields.

Occupations of men.

The men of the agricultural population are engaged in one or other of the operations of husbandry all the year. The daily round depend very much on the kind of holding cultivated. On lands which depends solely on the rainfall, and these make up almost the whole district, the peasant has periods of feverish activity, followed by long stretches of leisure when the agriculturist finds it difficult to employ his time. When rain falls every available plough is taken out, and the fields are alive with men and oxen taking advantage of the welcome moisture. Except in the coldest weather work begins at day-break, and goes on as long as the bullocks can work. In the hot weather the cultivator is out before day-break and continues working till the heat of the sun becomes unbearable. He then ties up his bullocks under the shade of a tree and himself indulges in a siesta till it is cool enough to begin work again. In the cold weather work begins about seven, the midday siesta is not indulged in, and the peasant retires to rest about eight. At harvest time the *zamindár* labours all day long cutting and gathering in the crop. When neither ploughing nor harvesting is going on, there is little to be done. Especially in December and January there is little for the owner of irrigated land to do. On wells the labour is constant. In the hot season the peasant gets up about 2 A.M., gives a feed to his bullocks. and goes to sleep again till just before dawn : when he gets up, has a smoke, says his prayers, if given that way, and goes off with his bullocks to work his well or plough his fields. If it is his turn to get water from the well he works his bullocks perhaps all day or all night, in relays until his turn is at an end : if not, he unyokes them about midday, and turns them loose to graze while he himself has a siesta. When it begins to get cool in the afternoon he does light work in the fields, weeding the crops or clearing the irrigation channels. At sunset he goes home, ties up his bullocks, milks the cows, gets his supper, has a smoke and a chat with his fellows at the village gathering place (*dáera*), and goes to bed about 10 P.M. In the cold weather the day is shorter, work is not begun before seven, the midday siesta is cut out, and the *zamindár* goes to bed earlier.

CHAP. I. C.

Population.

Occupations of men—*contd.*

When sowings are going on the cultivator will be out all day. Maliárs work on their irrigated lands chiefly with small hand hoes all day. The women of this tribe also do much work of this kind. At all times of the year the cultivator has to feed and water his cattle and to prepare oil-cake and sift chaffed straws for them. On this work all the males of the household, from five to six years of age and upwards, give their aid.

Jodhrás, Ghebas and some others of the aristocratic tribes, do not cultivate themselves, and live a life of almost complete idleness unless they have taken service in Government employ.

Occupations of women.

The real occupations in life of a woman begin when she marries, at the age of from 12 to 15. When she first goes to her husband's house she is generally treated as a guest and excused from all labour for a longer or shorter period according to her husband's status. This period of ease lasts for from ten days to a year. When it is over, there begins a round of drudgery which lasts as long as she has strength to endure it. Early in the morning before sunrise, she rises, makes the butter, and sweeps out the house and fetches the water, from two to five *gharrahs* full. Sometimes the well or watercourse is close by, and sometimes far away. When the women are in *parda* as in the Chhachh, they bring the water before day-break. Later, she grinds the corn for the day's food, collects the cow-dung, prepares her husband's morning meal, and, if he is out in the fields, takes it to him with butter-milk. On her return she eats her own breakfast, spins the clothes of the family, grinds more corn, and does laundry work. Then water has to be fetched a second time, and dinner cooked and served to her husband. Her own dinner, and a turn at the spinning wheel, finish the day. In addition, there are the care of the children, and other domestic duties. She also helps with the business of the farm. If cotton is grown she does the picking (*chunai*). In harvest time she watches the ripening crops to keep off the birds, and also gleans behind the reapers. Among the lower classes, she carries manure to the fields, weeds the crops, and makes herself generally useful. From time to time she has to plaster the walls and floors, and repair the fireplaces, and so on. The rest of her time is taken up in going to and from wedding or funeral feasts and ceremonies, saying her prayers and other miscellaneous matters. The women of the lower cultivating classes assist the men in every branch of their work, except ploughing. Maliárnis in particular have many cares other than domestic. Besides weeding and other agricultural duties they spend much of their time selling their garden produce in the towns and large villages. Generally, the higher the tribe

comes in the social scale the less the women help the men in out-door work. There are few *pardanashin* women south of the Kála Chitta.

DIVISIONS OF TIME.

The day is divided by the Muhammadans and Hindús in the following portions :—

Mussalmáns.	Hindús.	Corresponding English time.
Sargi	..	3 A. M.
Dhami or Suntán da vela ..	Amrit vela or Parbhát vela ..	3 A. M. to 4. A.M.
Fajr or Namáz vela ..	Baravela	About 5 A. M.
Kachchi roti vela ..	..	8 A. M.
Roti vela	Roti vela	10 A.M.
Dopahrán	Dopahrán	Noon.
Dhalle hue din ..	..	1 P.M.
Peshi	..	2 P.M.
Lohri Peshi	Laudhe vela or nadhe vela or	4 P.M.
Digar	Degchián vela	5 P.M.
Din andar báhr ..	.. ..	Just before sunset.
Namashán or Shám ..	Tarkálin vela	7 P.M.
Khuftin or Sota ..	Sota	8 to 10 P.M.
Adhi rát	Adhi rát ..	Midnight.

MANNERS.

The following from the Shahpur Gazetteer is equally true of this district :—

" The rules of etiquette are not very well defined, and differ greatly from those in vogue in European countries. Women are not treated with such deference, and are ignored as much as possible out of doors. When a husband and a wife are walking together, she follows at a respectful distance behind. A woman should not mention the name of her husband or of his agnates older than her by generation. Words denoting connection by marriage have become so commonly used as terms of abuse that they are not often used in their proper sense ; and a man gene-

CHAP. I. C.
Population.
Manners—contd.

rally speaks of his father-in-law (*sauhra*) as his uncle (*chácha*). It is shameful for a man to go to his married daughter's house, or to take anything from her or her relations: on the other hand, a son-in-law is an honoured guest in his father-in-law's house. When a married woman goes to visit her mother, it is proper for the women of the family, both on her arrival and departure, to make a great lamentation, and lift up the voice and weep."

"When friends meet, they join but do not shake hands, or each puts out his hands towards the other's knee: or if they are very great friends they embrace each other breast to breast, first on one side and then on the other. If a man meets a holy person (*Pír*), he touches the latter's feet by way of salutation. Should acquaintances pass one another, one says *Salám alaikum* (peace be on thee), and the other replies *Wa alaikum ussallám* (and on thee be peace). They then enquire after each other's health, the usual question being 'Is it well?' (*khaire*), and the answer 'fairly' (*val*), or 'thanks (to God)' (*shukr*). When a visitor comes to the house he is saluted with a welcome (*ami* or *ji aea*), and answers 'blessing be on thee' (*khair hovi*). The use of chairs and tables is becoming more common, but it is usual for a peasant when resting either to sit on his heels (*athrúha*), or to squat on the ground cross-legged (*patthalli*), or to sit on the ground with his arms round his knees, or with his *chádar* tied round his waist and knees (*goth*) to support his back."

"Some of their gestures are peculiar, although, as in Europe, a nod of the head means 'yes' or 'come,' and a shake of the head means 'denial.' Thus, a backward nod means 'enquiry,' a click with a toss of the head means 'no,' jerking the fingers inward means 'I do not know,' holding the palm inwards and shaking the head is a sign of prohibition, holding up the thumb (*thutth*) means 'contemptuous refusal.' Wagging the middle finger (*dhiri*) provokes a person to anger, and holding up the open palm is a great insult. In beckoning a person the hand is held up, palm outwards, and the fingers moved downwards and inwards."

FOOD.

The main food-staple is wheat, but this is often supplemented with *bájra*, which is generally eaten during a great part of the winter instead of wheat, and is rightly supposed to be very sustaining. In villages where there are many wells, maize becomes an important food-staple. Gram is eaten only by the poorest, and, except in the Jandál *iláqa* of Pindigheb, it is not common to mix it with other grains or the food of the people. Rice, moth, and barley are all pleasant now and then for a change, but are only fit to nourish

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women, children and horses. *Ság* or green stuffs furnished by the green leaves of gram or mustard in season supplement the *bájra* cakes. *Ghí* is a luxury not much indulged in. When it is made by *zamíndárs* it is usually for sale and not for home consumption. *Gur* is also a luxury not easily obtained, except in the Chhachh *iláqa* of Attock Tahsíl. Meat is eaten by all who can afford it, and milk is largely consumed at all times. Meat and sweetmeats (*halwa*) are essential on the occasion of the Ids, or when friends are gathered together to help in carrying out some heavy piece of embanking or other work : such gatherings are called *vangár*, and are not uncommon.

The regular meals of the ordinary agriculturists are two, one in the morning about 10 A.M. and the other at sunset, but often two light meals, consisting of the remnants of previous meals, are taken.

At *kachchi roti vela, i.e.*, 8 A.M., a small meal of bread (*chapátis*) cooked the night before, and left over from last night's meal, made of *bájra*, or wheat, with butter-milk, or salt and pepper, if *lassee* (butter milk) cannot be got, may be taken. The first big meal of the day comes on at *roti vela*, 10 A.M.; a full meal of new baked cakes (*chapátis*) of *bájra* or wheat, with butter-milk. At *peshi vela*, or 2 P.M., or so, a piece of the bread left over from the morning meal is eaten with salt and pepper. At *namáshán*, 7 P.M., the chief meal of the day, consisting of *bájra*, wheat or maize cakes with *dál* made of *mash*, *mung*, *moth* or *ság* (*tárámirá* or *sarson*) is eaten.

Among Musalmáns, meals are cooked at home in the cold weather, and at the village *tandúr*, by the Jhínwar in the hot weather, but this custom, though very general, is not universal, and Jhínwars are not found in every village. The meals of Hindús are always cooked at home. The Jhínwar is paid by being allowed to retain a portion of the flour brought to him to be cooked. The men of the household eat first, and after them the women.

DRESS.

Clothing of men.

The clothing of men varies slightly in different parts of the district. The *pagri* is usually of large size, often twenty yards in length. Those of Tahsíls Pindigheb and Fatehjang are often of most imposing dimensions. The greater the social importance of the wearer the bigger the *pagrí*. A sheet of cotton cloth, which is always of country make, is wrapped round the loins and reaches to the ankle, and is called *lang* or *majhla*. In many cases, especially among those who have any connection with official life, the *lang* gives place to the *páijámás*. The upper part of the boy is clothed in a tunic or *kurta* of cotton cloth, which slips on over

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the head, and the neck opening is fastened with a small thread button on the left shoulder. The *kurta* is generally loose and wide and reaches nearly to the knees. Many of the younger men in parts of the Thal wear no *kurta* at all. The *chadar*, however, is universally worn. It is a sheet made of *Gárah*, a coarse white cotton home-spun, about three yards in length and one and a half in width. It is worn as a cloak, wrapped shawlwise round the body. This is the hot weather dress. In the cold weather the *fargal* or *anga*, a sort of loose coat, wadded with cotton, and reaching nearly to the knee, is put on over the *kurta*, but often it does the duty of both. Sometimes, the only change made in the cold weather is to replace the *chadar* by a sheet of double-woven cotton called a *dohar*, or a soft blanket, usually made of sheep's wool, and called *loi*, is worn. Richer people prefer a light quilt called *dulái* to the *loi*. The shoe (*jutti*) are of the usual description. Sandals, *kherí* or *chaplí*, are worn in some parts of the Tallagang, Pindigheb and Fatehjang Tahsíls and in the Khattar tract of Attock. Blue *pagrís* are common in Chhachh and Makhad, but blue cloth, which Colonel Cracroft describes as the common dress in these tracts, is not now often seen. The taste for European cloth has spread largely among the well-to-do and the extravagant, especially for long coats and for waistcoats, but it is still little used by the common folk. Men of position often wear a long *chogha* or coat with roomy sleeves, and a *dopatta*, or shawl, worn plaid fashion across the shoulders.

Clothing of women.

The women's costume does not differ very materially from that of men. They wear loose, very full, trousers called *suthan*. These are usually of coloured cotton cloth, with silk lines running through them. They contain much cloth, sometimes as many as twenty yards or more, and hang in innumerable folds ending in a tight band at the ankles. Women generally have a dress fair and a working fair, the latter lasting for years and finally consisting of an aggregate of patches of many different coloured cloths. *Kurtas* are worn universally, and consist of cotton cloth, usually finer than that used by the men, of home-spun, or purchased from the bazars, usually coloured, but sometimes white. The *kurta* hangs loose over the band of the *suthan*. Over all is thrown the *chadar* or *bhochhan*, a kind of shawl, worn over the head, and hanging down over the shoulders and body. It is usually about three yards in length, and may be of any colour. The women's shoes are of the usual type. The same dress is worn throughout the year, but the thickness of the material varies.

The *salári* is a coloured cloth, usually blue or yellow, used on gala occasions, or on appearance in public, and is made of cotton mixed with yellow or red silk. These often give a gay and pictur-

esque appearance to a group of women. They are much worn about Hasan Abdál and in the Attock Tahsíl, but are used throughout the district.

The chief difference among the Hindús is that they tie their turbans in another way, and that the shopkeeping classes in some parts of the district use the *dhoti* or loin-cloth. Also the *lang* is not worn. The women also dress their hair differently. The ordinary Muhammadan, of both sexes, can be distinguished at a glance from the ordinary Hindú, but the difference is one of general appearance more than of dress.

ORNAMENTS.

Men wear few ornaments, though it was undoubtedly once the custom for them to carry a good deal of jewellery. A ring, *chháp*, a signet ring usually of silver, is the only common ornament for men. An amulet (*táviz*) of some sort or other may be worn on the arm or the neck. Boys wear a necklace, *hassi*, a small ear-ring, *mundrán*, usually of silver, occasionally of gold, and a bracelet, *kara*, but these are discarded later in life. The practice of loading boys with jewellery is in decay. The women's ornaments are limited only by the want of money to buy more. The following are a few of the commonest. All are ugly, and many are heavy, and must cause the wearer a lot of inconvenience. They are not worn by widows.

Pazeb or anklet, usually of silver ; *kara*, a bracelet, also usually of silver : *bangán* or *chúrian*, bangles of silver ; *chháp*, a finger ring ; *chhalla*, ring ; *hasli*, necklet, usually of silver ; *itti*, locket of gold or silver ; *bahádarián*, large ear ornaments, usually of silver ; *tavítri*, an ornament worn on the forehead ; *koka*, or *nali* or *long*, nose-ornaments of silver or gold ; *bolák*, a golden nose-ornament ; *nath*, a nose-ring ; *bhovatta*, a silver armlet, worn above the elbow ; *chandkán*, an ear ornament of silver ; *patri*, a thin ring, with a broad back ; *har-hamel*, a necklace of coin, rupees or eight-anna pieces strung together ; *tikka*, usually of gold, worn on the forehead ; *dholna*, of silver or gold, an ornament worn like a locket ; *chaunp-kali*, another neck ornament ; *hauldili* or *dilrakhni*, a kind of charm of stone set in silver, worn round the neck, and sucked by the wearer ; *táviz*, usually of silver, a charm, a kind of philactery, worn on the arm, or more usually on the neck and *jugni*, a small gold ornament, usually attached to a necklace.

HOUSES.

Throughout the district, the houses of the people consist of one or more rooms called *kothas* with a courtyard, called *vehra* or *sahn* in front.

The house itself is usually made of rough stones and mud cement. It is always one-storied and low in the roof, being not

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more than 10 or 12 feet high. It consists in general of one large room about 86 feet long by 15 feet wide, with one or two other rooms built on, each about 12 feet square. The roofs are always flat and are used as sleeping-places in the hot weather. The walls are too weak, and have too little power of resisting the rain to support the roof, which is accordingly held up on strong posts driven into the ground, the wall acting merely as a defence against the weather. Across the beams wooden rafters are laid, and over the rafters branches and leaves. The whole is then well covered with earth mixed with chopped straw. It is then plastered with cow-dung and chopped straw. The timber used is usually *phuláh kao, tút, kikkar* or *ber*. *Deodar* or *shisham* is seen only in the houses of the rich. As a rule, the houses of the peasants are built for them by the village carpenter or potter, who receives his food while the work is going on, and a present of clothes or money when it is finished. Payment for work at a fixed rate is made only by the Khatrís and the non-agriculturists.

The house is generally built at one side of an enclosure, surrounded by a mud wall. The courtyard may be common to several houses. On one side, adjoining the house, will generally be found a cattleshed; built much in the same way as the house itself. Sometimes, however, cattle are kept in part of the dwelling house, access to their part of it being through the main living rooms. The courtyard generally has a manger (called *khurli*) of clay for the cattle. On the other side of the courtyard ranged against the wall of the enclosure is a raised earthen bench with the family *chula* or fireplace, earthen water pots, etc., and on the fourth side of the square is the entrance door, and possibly another rough shed for cattle or goats, or for a store of grass and other fodder. Outside the enclosure there is often another enclosure set round with a loose thorn hedge for the protection of goats and sheep.

The doors of the house itself revolve in wooden sockets or are made like shutters, and are closed usually by hasp and padlock. Inside, the houses are in general kept scrupulously clean, the walls *leeped* and polished, or sometimes white-washed, with the pots and pans of the household arranged upon shelves or in recesses. In the matter of ventilation, however, the houses leave a good deal to be desired. The floor is only of earth but is kept clean and neat, being frequently hand-scrubbed with light clay and cowdung.

Especially on well irrigated lands the enclosure often contains a Persian lilae tree, and acacia or a *ber*, which gives it a more pleasing appearance.

FURNITURE.

The furniture in the house consists chiefly of necessaries. Every house contains receptacles for storing grain. These are made by the women of the house-hold from fine white clay mixed with chopped straw. The larger receptacles are called *kulih*, the smaller *ghalota*. The former is usually a rectangular tower built in one corner of the main rooms open at the top, with a moveable lid, and an opening at the side for taking out the grain. It holds up to 25 or 30 maunds. The latter is much smaller, is circular in shape, and holds three or four maunds. A few beds (*chárpáis*), often coloured a bright red with some kind of lacquer, several spinning wheels, several low stools, a churn, a handmill or two for grinding corn, pots and fans, trap, baskets, cotton quilts (*tulái* or *lef*), and all kinds of odds and ends are found in every peasant's house. But there is no confusion. Everything is neatly arranged in order. Space has to be economized and things not in use are disposed on shelves and in bags.

The cooking vessels used by the villagers consist of —

Katwi (*degchi*), a big vessel in which the food is mixed and cooked, to stir which a *chamcha* or *doi* (spoon) is used ; *rakábi*, a saucer, used as a small dish ; *tabákh*, an earthen vessel, used for putting bread on, and for mixing the flour with water before cooking ; *sahnak* or *parát* larger earthen vessels of the same kind ; *gharrah*, earthen pot for water ; *katora*, a small open vessel, usually made of mixed metal in this district ; *thál*, also of mixed metal, for placing bread upon when about to be eaten ; *piála*, *tás*, *bathal* or cup, of earthen ware ; *changer*, or *chhakor*, a sort of flat open basket or wicker tray ; *tind*, an earthenware vessel, a sort of small *gharrah* ; *tawa*, a flat iron dish or plate upon which the bread is cooked in (*chapátis*, etc.) ; *karáhi*, also of iron, with two handles, of all sizes, used for confectionery ; *kúza*, usually an earthenware vessel used for washing the hands ; *chatúri*, used for keeping milk, made of earthenware ; *dola*, also of earthenware, used in milking, etc. ; *galni*, an earthenware vessel used for making butter, curds, etc. ; *kulfi*, an earthenware vessel with a lid to it ; and *battakh*, an earthen water-bottle, used by pedestrians, or by shepherds, graziers, etc., to carry their drinking water in.

The miscellaneous articles usually found in a *zamíndári* house consist of—

Píri, a low square stool some 6 inches high and 18 inches square, on which women sit ; *chaki*, the flour-mill of two stones, one of which revolves on the other ; *chúla*, the fire-place ; *charkha*, the spinning wheel ; *súi*, needle ; *chhanni*, or sieve for cleaning flour ; *pakhí*, small fan ; *tokra*, basket for various purposes ; *úri*, a kind of bobbin from which the thread is spun ; *ateran*, for winding

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Population.

Furniture—*concld.*

thread on to before placing it on the bobbin or *úri*; *silái*, a large iron needle; *nálá*, a kind of reel; *tarakla*, a bobbin; *karandi*, an iron ladle for oil; *madháni*, a churn put into the *galni*, and revolved to make butter; *belni*, a cotton gin; *tarakri*, scales; *binda*, a low stool; *palang*, a bed; *balang*, ropes for hanging clothes on, clothes lines; *díva*, small lamp, *chirágh*; *chhaj*, a sort of shovel-shaped basket for sifting grain, or, when larger, for sifting refuse; *langrí*, a mortar of stone or hard earthenware; *chattú*, a large stone mortar; *mohla*, a pestle made of wood; *chaukí*, a square unbacked chair; *choha*, a measure of capacity, usually of wood; *paropí*, a small measure of the same kind; *bat*, a weight, usually of stone; *dabba*, a small round box of wood or brass; *surmedání*, a small vessel for blacking the eye-lashes; *shísha*, small looking-glass; *ucha*, a small pair of pincers for extracting hairs and thorns; *pírha*, a very low chair with a back, lacquered usually, and used at marriages and feasts; *matti*, a large earthen vessel for water; *jhawli*, an earthen vessel used for holding miscellaneous things; and the *hukka*, last, but not least, completes the tale.

DISPOSAL OF THE DEAD.

Muhammadans.

When any Musalmán dies, his relatives are summoned by the *nái* or other *kamín*, and the female relatives assemble and weep round the body. His male relatives in this district go themselves to dig his grave, and preparations are made for the funeral feasts.

If the deceased is a male, the *Imám* of the *masjid* bathes the body; if a female, the women of the family bathe and lay it out, and the shroud is prepared of white cotton cloth. Twenty-five yards are taken up in a man's grave clothes, which consist of a suit fitting to the body, and two long winding sheets.

When the grave is ready, the bed on which the body is lying is lifted by the near relatives and carried to the grave, those accompanying it repeating the *Kalma* as they go, having prepared themselves as for prayer. At some distance from the grave-yard the bed is set down with its head to the north and its feet to the south. The Mullán stands on the east side and turns his face towards Mecca, and the by-standers range themselves in three rows behind him. Prayers are then said, and charity is collected from Rs. 3 to Rs. 40 in cash, or grain from 4 to 20 maunds, with copies of the Korán. The Korán is first passed round from hand to hand, and then the money, grain and copies of the sacred book are distributed. The charity thus collected is known as the "*askát.*" It is divided into three shares; one share goes to the *Imám* of the *masjid* who leads the prayer, one share to the *kamíns* or village servants, and one share to the other Mulláns, Darweshes and the poor who may be present.

After this the body is taken to the tomb, and lowered into it. The grave is always made north and south, and the head is placed north and the feet south, the face as far as may be, being turned towards the Qibla and Mecca; the winding clothes are then loosened and the tomb is closed with stones and filled in with earth and gravel, made into a mound. One stone is set up at the head and a smaller one at the feet, and thorns are placed over the grave to keep off animals. The *Imám* then stands at the west of the grave and exhorts the people that all must die, and then gives forth the call to prayer or *báng*.

Disposal of the dead—concld.

Then the relatives and others who have come in are fed by the deceased's relatives. After four days, charity is again dispensed, and for the next four Thursdays the Mulláns are fed. After forty days, charity is dispensed, and thereafter one day in each year is fixed for a commemoration feast, to which the relative bring contributions with them, and all the brotherhood; the Mullán and *Imáms*, any strangers who may be present, or any mendicants who may ask for it, are fed, and as much as twenty maunds of flour and ten maunds of meat are sometimes consumed. These funeral feasts and expenses are nearly as great a strain upon the resources of the people as the expenses of their weddings.

It is generally possible to distinguish between the graves of men and of women by the manner in which the gravestone is set up. In one part of the district the male has the gravestone at one end, and the woman at the other. Elsewhere one sex has the stone placed parallel to the length of the grave, and the other has it parallel to the breadth, in other parts no such distinction is made.

Hindús.

When a Hindu dies no food is cooked in the house on the day of the death; the neighbours provide what is necessary. The house remains in mourning so long as the funeral ceremonies (*kirria karam*) last, usually for 13 or for 11 days, the nearest relatives of the deceased sleeping on the ground. After that all clothes and vessels are purified, and the earthenware *gharrahs* and other utensils are replaced by new ones. The body of the deceased person is burned in the usual manner, and on the fourth day after the death a bone from each limb is collected and sent off to the Ganges in charge of a Brahman or a relative. If this cannot be done at once the bones are deposited in the walls of the *dharmsál*, or buried, and eventually sent to the Ganges, nearly always within the year. On the return of the messenger from the Ganges the Brahmans are feasted in thanksgiving for his safe return.

AMUSEMENTS.

Amusements.

The *zamíndár* of the district, for all his laborious toil, allows himself a considerable amount of recreation—marriages and fairs are special occasions in which every one joins once or twice a year. There are also a number of games which are frequently played lain the villages.

The great game of the district is *pirkaudi*. This is played by the villagers themselves, and often in competition by the men of various villages. Large numbers join, and it is played at all times of the day when not too hot. Many villages are only too glad of an excuse to forsake work and play *pirkaudi*. One man runs out into the open, two others pursue him. He tries to hit each of his pursuers in turn and then escape while they attempt to throw him down, but they must do so before he has touched them. The game causes the greatest excitement and rivalry between adjoining villages. *Bughdar uthâná* or *tarár utháná*, the lifting of heavy weights, *mungli-pherná*, the working of heavy Indian clubs, and throwing stone are popular amusements.

Bíní pakarná is a kind of wrestling in which the athletes seize each other by the wrist only, but wrestling is not a village game at all. Wrestling matches excite great enthusiasm, but very seldom take place.

Sammi, luddi, bhangra and *dhamál* are each different dances, and are usually practised at weddings, or other joyful occasions.

Tent-pegging (*neza-bázi*), lime-cutting and similar sports are practised to a considerable extent in parts of the district particularly in Tallagang. Some villages, however, such as Láwa and Tamman, the Malliks are still very fond of it, though they are not very skilful. An interested crowd always gathers to watch and applaud.

The higher classes, especially the Chaudhrís of Tallagang, and the Jodhrás of Pindigheb, go in a good deal for hawking, coursing, and more rarely shooting.

The boys in the villages play various games, some of them resembling those played by English boys. *Lambi-kaudi* and *kaudi kabadi* are kinds of prisoner's base, but quite different from *pirkaudi*; *chhappan chhot* is the same as hide-and-seek; *khanhuri-tala* corresponds to "tipcat;" *chinji-tarap* is hopscotch; and there are various other games of a similar kind.

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Population.
Fairs.

FAIRS.

The *melás* or fairs, which are common in the district, are usually semi-religious gatherings. They are nearly all connected with shrines, and an important feature of the *mela* is the making of offerings to the shrine, and the distribution of food from the *langar* of the shrine. The chief fair in Tallagang is that held at Jabbi. Four large fairs, known as *Urs*, are held yearly at Makhad, on the Indus, in Pindigheb Tahsíl, at the shrine or *ziárat* of Sayyad Abdullah Shah, Giláni, known generally as Núri Badshah. Large crowds gather to pay honour to the shrine, and on these occasions great quantities of food are distributed. The principal fair is held in August and is attended by about 6,000 persons.

In Fatehjang Tahsíl a fair attended by about 4,000 persons is held at Kot in the month of Baisákh, and again in September.

At Attock a fair takes place at the shrine of Sultán Sadr Din, Bukhári, on the first Thursday of Bhádon, and is attended by about 7,000 persons, both Hindú and Muhammadan. There is also a shrine at Thikárián, Tahsíl Attock, the Khángáh of Mián Wali Sáhib, Gujar, visited by persons suffering from diseases of the eyes. Cures are supposed to be effected by placing upon the eyes earth from the tomb.

At Hassan Abdál there is a very well known shrine at the top of the Hasan Abdál hill, 2,346 feet high. The shrine is the Khángáh of Wali Kandhári. It is visited every Thursday by a number of persons, and throughout Thursday night in the shrine a lamp is kept burning, which in the common belief cannot be extinguished by wind or rain. The Panjá Sáhib tank and temple are also the scene of a religious gathering in Baisákh, which is growing in popularity and is attended by several thousands.

These are the chief fairs of a religious nature in the district, but there are many others held at various intervals which do not justify special notice. No *mela* compares in importance with the celebration, *e.g.*, at Tháneswar or Pehowa in the Karnál District.

NAMES AND TITLES.

There is nothing noteworthy about the personal names in common use in the district. The few Gakkhars and Janjuas occasionally employ every high sounding names, as they do elsewhere, but the members of the prominent tribes in the district are content with the more sensible names they have inherited from their ancestors. The Patháns of the Chhachh and Makhad have of course distinctive names, but there is nothing peculiar about them. The common *zamíndár* names are everywhere employed, and

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Population.

Names and tables—*concld.*

abbreviations are extremely common; Mandu for Muhammad Khan, Ditta for Allah Ditta, Maula for Maula Bakhsh, Faja for Faiza Khan, and similar contractions. As for titles the commonest is "Malik." It is used by the heads of the Jodhrá families, and by all the headmen of the Awáns. "Rája" is applied to Gakkhars and Janjuas, but in strictness the younger members of the family should be addressed as Mirza. "Sardár" is the title of the chief Ghebas. The Khattars use the same title. "Chaudhri" is the title of prominent Mairs and Kahuts. It is also used by Játs and others. The headman of the Alpiáls is addressed as "Chaudhri." The Gujars use "Chaudhri" or "Mehr." Among Hindús the usual titles are in vogue. The Muhiáls are generally called "Mehta" but the titles of "Dewán" and "Bakhshi" are also in use. "Raizáda" is not used in this District. Holy men among the Muhammadans, whether of Sayyad descent or not, use the title "Pír." Among the Hindús they secure the title of "Bhai." Paráchás are addressed as "Mián."

CHAPTER II.—ECONOMIC.

Section A.—Agriculture and Irrigation.

CLASSES OF AREAS.

CHAP. II, A.

Agriculture.

Areas.

The area of the district is divided as follows (1927) :—

	Acres.
Cultivated	1,048,978
Culturable waste	1,625,947
Government Forests	201,953
Other unculturable waste	1,361,597

The last item consists chiefly of ravines, torrent beds, hills and rivers.

SOILS.

In general, the soils of the district take their character from the underlying rock, and are in consequence either limestone or sandstone detritus ; but there are wide variations from this rule, and it will be necessary to mention one or two circles in some detail.

Chhachh ka dil.

The portion of the Chhachh north of the Chel stream is totally distinct from any other tract in the district. The lands nearest to the Indus are poor in quality, very sandy and stony, but the remaining area of this part of the circle, the tract known locally as "Chhachh ka dil" (the heart of the Chhachh) is of the highest fertility. The soil is a rich loam, an alluvial deposit from the Indus and the surrounding hills. Water is near the surface, wells are numerous, and the farming, especially of well lands, is excellent. The crops of sugarcane, tobacco and maize on the well lands, and of maize and wheat on the *barani* lands, are always heavy. "*Chhachh ábád te mulk ghair ábád*" is a common saying, meaning that the Chhachh does best in seasons of scant rainfall, the soil being naturally moist. It does not do badly even in years of heavy rainfall, though the yield invariably suffers. South of this fertile tract and on both banks of the Chel is a narrow strip of swampy ground.

The Chel lands.

Water is nowhere more than a few inches below the surface, and constantly oozes out on the surface. Every hole and depression is full of stagnant water, and there are few fields that are not water-logged. The case of high-lying fields is even worse, for their soil is a prey to *kallar* that has been deposited by evaporation from moisture brought up to the surface by capillary attraction. The water in the main channel of the Chel is only a few inches below the surrounding ground. The current is sluggish, the

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channel being narrow and much choked by agnatic weeds. This tract extends from Musa Kudlathi to Shamsábád, and was thus described by Mr. Steedman, Settlement Officer, at Revised Settlement (1884) :—

"The Chel lands are situate along the Chel stream, on either side, from the village of Khagwání to that of Shamsábád. The water-logged condition of these lands is due, I fancy, to the following causes : The Chhachh plain is some 300 feet below the watershed running from Lawrencepur to the Attock hill. Water, throughout the plain, is near the surface, and is, I believe, supplied by percolation from the Indus. The rain that falls on the high-lying Maira above sinks in and finds its way down to the Chhachh plain ; and there, meeting the subsoil springs of that plain, is forced up to the surface between the plain and the foot of the Maira. My answer to the question,—Why then does not water ooze up all along the base of the Maira ? is—(first) that probably the sub-soil drainage of the Maira is directed on to the Chel lands by the Kámra hill on one side, and spurs from the Gandgarh on the other ; and (secondly) that from Shamsábád the water-table is farther from the surface, and Chel runs in a deeper channel. The lands between the Chel stream and the Maira are consequently much wetter than those on the right bank. The soil itself, apart from the water, is good enough—a light loam, without any approach to clay, except in a few spots. A good deal of harm has been done by *kallar* on the right bank near Darya ; and also on the left bank near Shamsábád. Judging from the general tenor of Major Cracroft's report, the village assessments, and the villages' internal rating, there must have been great deterioration in these lands since the first Settlement. They are now poor, sour and water-logged soils, on which only *kharif* crops can be grown with any chance of success ; either *kallar* or water being fatal to the greater part of *rabi* crops, if sown."

All the above was written in the Gazetteer of 1907 : and the picture was true in 1925 when Mr. Barry's Assessment Report was written. The only difference was that more land had become sour : more villagers had abandoned agriculture for tonga-driving or other labour : and a large percentage of children had fallen sick, so sick that in 1925 in Bahadur Khan the spleen census, as noted elsewhere, had reached 99 per cent. In 1925, after consultation with the Drainage Engineer, villagers were encouraged to dig drains from their villages, in some of which, *e.g.*, Sayadan and Bahadur Khan, the water level in the winter was flush with the soil surface, down to the Chel : and when seven villages had thus commenced to help themselves Government came to their further

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—
Agriculture.

The Chel lands—*concld.*

assistance and constructed a comprehensive drainage system, stretching from Hazro and Musa Kudlathi to Shamsábád. In 1925 the *kharif* had entirely failed : in 1926 the first year after the drain though the weather conditions were approximately the same, there was a bumper crop of maize and chari. In Jatiál sugarcane and cotton were cultivated and did well : and though rabi cultivation has not yet become generally possible, the improvement in the health and welfare of the tract is enormous. In 1904 the " Hatti Jhil " spread over 607 acres. In 1924 this had increased to 767 acres. In 1929 the whole of this *banjar qadím* had become " cultivated ", except the strips occupied by the drains themselves. In 1929 there were 24 acres of sugarcane harvested. The drains, however, must be regularly maintained and extended : and in time it should be possible to convert the swamp, of which Mr. Steedman wrote, into valuable well land.

Less successful has been the attempt to divert the spill waters of the Gandgarh range to the north. These waters, which if left untrained, would menace the town of Hazro, were diverted in Mr. Steedman's time to the Indus by a bund constructed so as to divert the torrent that comes down past Qibla-bandi. The bund broke in the first decade of this century : and in Mr. Butler's time Hazro was flooded. In consultation with the Urban Sanitary Board, a cut, known as the ' Sarwana Nála,' was made to the east of Hazro with a view to leading these spill waters to the Chel. In 1925 it was alleged by those whose lands were being ruined by the ever-increasing swamp, that this additional spill was more than the Chel could carry : and was the immediate cause of their increasing misery. Certain it was that the design of the cut had not proved successful : and each flood that came tore from either bank more and more of the valuable well land which fringed it. The Drainage Board accordingly designed a vast bund, stretching for four miles which was to collect the spill from the Gandgarh and turn it into an escape channel north of Ghurghushti. In 1928 and again in 1929 and 1930 the bund breached : and caused considerable distress, for which compensation has had to be awarded. At the time of writing the future of this work is still undecided. The project was sound in itself and might have led to the ultimate canalization of the poorer villages. But detailed calculation and execution appear to have been faulty.

The fringe the Sarwála ridge.

From the edge of the Chel, the terrain rises to the high ridge, the watershed between the Chel and the Haro systems extending from the foot of the Gandgarh mountain, some two miles south-east of the Qibla-bandi hamlet of Mauza Malikmála, to the village of Rúmián at the foot of the Attock hill. The western end is a

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rocky spur moving down from the Gandgarh mountain, and attaining a maximum elevation of 1,869 feet close by the tahsíl boundary. The rocky formation soon ceases, and is succeeded by indurated clay cliffs, that are in turn replaced by a ridge of loose sandy soil. The northern fringe of this slope down to the edge of the Chel lands is mostly composed of a poor sandy soil and falls gradually to the plain below. Here and there soil of a more clayey composition is found and the gradual slope disappears. The surface becomes broken and intersected by drainage channels with high steep clay banks. Beyond Qibla-bandi the character of the slope changes altogether. The soil is a stiffish loam near the plain, but as the Gandgarh spurs are reached, the soil becomes stony and further on rock crops out. The drainage channels are abrupt and steep, and the beds are lined with coarse sand and rocky detritus from Gandgarh.

The Maira.

From the watershed between the Chel and the Haro to within a short distance of the latter stream, and from the Indus to a few miles beyond the village of Mirza, extends a rolling sandy plain generally known as "Maira" by the natives. Near the Indus there is some hilly and ravine ground, but elsewhere the ground is fairly level, the drainage channels being little more than shallow depressions. All this plain suffers greatly from drought. It may not be cultivated for several harvests, and then in a year of good rainfall be all brought under the plough. Only the least valuable crops are grown, and there are constant failures of the harvests. Near the Haro the soil loses its sandy character, and is somewhat intermixed with stones. The country becomes very broken as drainage channels suddenly deepen, and with their lateral feeders become impassable ravines, except at a few known points. South of the Haro there is a decided improvement. The soil is not particularly good, and varies much in quality from loam to clay; but more use is made of surface drainage and the fields are better embanked.

The Attock Nála.

Westwards from Mirza to the Hazára border, near Bhedian, the strip of country along the right bank of the Haro is, with the exception of a few alluvial strips close by the stream, an intricate network of deep ravines and watercourses. The higher ground is generally strewn with water loam pebbles or coarse earthy kankar nodules. Here and there rock juts out. Cultivation is scanty, as the soil is extremely uneven and of the poorest quality. Further away from the hills there are fewer stones and soils varying from light to stiff loams. There is some capital land along the Káwagar hill. The country between the Káwagar and Kherimár hills is inferior. It lies high, is poor in point of soil,

and seamed with deep ravines. Rock constantly crops out, and is generally near the surface. The tract from Katárian westwards to the tahsíl border, and across the Grand Trunk Road northwards, to the villages irrigated by cuts from the Haro, contains the best *báráni* land of the circle. In quality it is loam, easily worked, and in years of good rainfall producing heavy crops. The rain lands in the villages along the Haro, after it turns south-west, are generally poor. There is hardly any level ground, and the best lands are those embanked in the ravines ; the rest are of inferior quality.

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Agriculture.

The Attock Nála—concld.

Yet, whatever the variations in the quality of soil, everything depends on the rainfall. In spite of the excellence of the soil to the west of the circle, one year there is no harvest at all, next year the crops are so heavy that the grain is with difficulty threshed and garnered.

Fatehjang Nála.

The Fatehjang Nála takes its character from the underlying limestone rock. The soil being of limestone formation is much superior to the sandstone soil south of the Kála Chitta. The tract is everywhere gashed by deep ravines which carry off the drainage of the Kála Chitta. To the west pebble ridges crop up. The circle is well watered by the numerous streams which run through. Though these streams occasionally dry up in years of poor rainfall, yet deep pools here and there allow of Jhallárs working on their banks, while wells are sunk in alluvial patches in their beds. The centre of the circle round Bahtar village is the most fertile and prosperous part of the district south of the Kála Chitta. On the east the Nála shades off into the western and drier part of the Kharora circle of Ráwalpindi, with which it has much in common.

The Gheb.

The Gheb lies between the Kála Chitta and the Khairi Murat. The soil resembles the dry gravelly soil of the Ráwalpindi Kharora. The east part is sandy, but fertile, while to the west the soil gets drier and harder. Generally, the soil is excellent and needs only ample rain to yield heavy crops, but is incapable of standing drought or the hot sun ot summer. The Gheb is not badly watered, and few villages suffer from want of drinking water.

The Jandál.

The Jandál villages are in strong contrast to the rest of the district. Ravines are few. Rock crops out only very occasionally. The greater part of the circle is a rolling plain of light sand. There is a little irrigation from wells and springs, but most of the tract is an open gram-growing country. Kharif cultivation is of little importance. Wheat is grown, but the characteristic crop is gram.

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Agriculture.

The rest of the district.

As far as soil goes the rest of the district is of one class. The soil is a light loam taking its character from the underlying sandstone rocks, which all over the tract frequently crop up to the surface. Soil is deep only in depressions. The surface of the country is scored by numberless ravines. The larger torrents have often wide beds of sand, fringed with broad or narrow strips of rich alluvial soil. On these strips wells are sunk. From the torrent bank the country rises in rough dry slopes of light loam soil, often washed away in places and exposing the rock below. In conformation of surface the Makhad *ilága* is somewhat different from the rest. The country is wild and mountainous. The soil is sandy, and is deep enough for cultivation only on the tops of the stony plateaux or in the deep valleys banked up at the lower end to catch the soil washed down in the floods.

CLASSIFICATION OF LAND.

Wells are few and Mr. Barry in his Settlement (1923—27) maintained the classifications adopted by his immediate predecessors.

These are :—

Irrigated :—

(*i*) *Cháhi.*—All lands irrigated by wells.

(*ii*) *Abi.*—Lands irrigated by springs or otherwise than by wells or canals.

(*iii*) *Nahri.*—Lands irrigated by canals. (There are none in these tahsils.)

(*iv*) *Sailáb.*—Lands flooded by streams, or which by the proximity of water are naturally moist.

Lipara.—Land adjoining a village site and enriched by the drainage of the village site, or by the habits of the people, or land which is habitually manured and is of excellent quality. Such land is generally double-cropped.

Las.—Land lying in a depression and receiving water from other lands, or land on which embankments have been built to retain drainage water. Such land is always of excellent quality.

Unirrigated—

(*i*) *Hail*, land regularly manured, which in practice means almost exclusively land close to the village *ábádí* or outlying homestead.

(*ii*) *Báráni Awwal*, land receiving drainage from higher ground, and retaining it either naturally, or by means of embankments.

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(*iii*) *Maira*, level or fairly level lands of average quality, which may in some cases receive a limited amount of drainage from above, but have no special means for retaining it.

(*iv*) *Rakkar*, land on a steep slope, off which all moisture quickly drains, or owing to excess of stones or sand or other disadvantage, distinctly inferior.

The following table shows the proportion of land in each of the principal classes as classified at the two last Settlements (figures from Assessment Reports) :—

Tahsil.		Percentage on total cultivation of								
		Chahi.	Abi.	Nahri. Do-Fasli.	Nahri. Ek-Fasli.	Sailab.	Lipára or Hail.	Las or Barani I.	Maira.	Rakkar.
Attock	1907 ..	6.0	.6	.9	3.2	1.2	2.1	6.0	74.3	5.7
	1927 ..	7.5	.6	.9	2.9	1.0	2.0	6.1	74.3	3.4
Fatehjang	1907 ..	3	..	..	..	2	3	5	80	7
	1927 ..	3.9	..	..	..	2.1	5.8	8.9	77.9	2.4
Pindigheb	1907 ..	1	..	..	..	..	2	2	92	3
	1927 ..	1.5	.1	..	..	.2	2.7	3.9	90.6	1.0
Tallagang	1907 ..	.9	..	..	..	..	10.5		88.6	
	1927 ..	.9	..	..	..	.6	1.4	7.6	87.6	1.9

CHAHI.

Well cultivation, which is of considerable importance, differs largely from tahsíl to tahsíl.

Attock wells.

The Attock wells are by far the most valuable in the district. The Chhachh wells are in a class by themselves. They correspond most closely with those of the Jabba Circle in the Swábi Tahsíl of Peshawar, and have the additional advantage of being more centrally situated for markets. A large number of them, moreover, get the Gandgarh spill, and grow tobacco, cotton and sugarcane. The *cháhi* area in the Chhachh covers over one-sixth of the total cultivated area, and pays more than half the revenue. The water-level is high and the wells are easily worked. There is still room for the spread of well cultivation. Indeed the only restraining influence is the want of manure. In the Sarwála wells are much fewer. Well lands cover about one-twenty-fifth of the total cultivated area and pay about one-third of the revenue. A large number of the wells are situated close to Campbellpur, which affords an excellent market, and in the northern part of the circle

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there are several wells which approximate in character to those of the Chhachh. There was an increase of 75 per cent. in wells in use in this circle during Mr. Butler's Settlement.

The wells in the Nála Circle are fewer in number: and protect only about 2·5 per cent. of the total cultivated area. The wells vary much in character. The majority are in the Saggar tract, where conditions are very favourable, and these are the best: but whereas the Sarwála wells are largely in the neighbourhood of Campbellpur, where manure is cheap and the market good, the Nála wells are far from any good market and are more expensive to work.

The well irrigation is of the general type found in Peshāwar, Ráwalpindi and the greater part of Jhelum. As compared with the third Settlement, the amount of wheat grown has almost doubled: maize has slightly increased, sugarcane, barley, and cotton have decreased. *Cháhi* land in the whole tahsíl measures 14,075 acres, and produces 26,400 acres of crops, *i.e.*, 100 acres of land produces 188 acres of crop.

Fatehjang and Pindigheb wells.

The Fatehjang and Pindigheb wells are less valuáble. The first great distinction is that south of the Kála Chitta and with the exception of the chahi land in the vicinity of Pindigheb and Tallagang towns—as compared with the cultivation of Attock Tahsíl and the tahsíls of Ráwalpindi District—the principal crops are ordinary zamíndár crops, maize, bajra, wheat and barley, while the rich garden crops which are so profitable where they can be successfully grown, are here but seldom grown at all. This is due perhaps to the fact that the cultivation is not in the hands of Maliárs, who have skill in market garden cultivation. The growing of garden crops and the hawking of them for sale is not considered dignified for a self-respecting zamíndár. Again, south of the Soan the wells are much less elaborate affairs than in the Fatehjang and Pindigheb Tahsíls.

The average *cháhi* area per well in use is 1·8 acre in the Jandál circle, 2 in Makhad, and 3·4 in the Sil. One hundred acres of *cháhi* land produces 202 acres of matured crop in the Jandál, 170 in the Makhad and 181 in the Sil. The two great well tracts are the valleys of the Soan and Fatehjang Sil, which lie close to one another and the valley of the Pindigheb Sil near Pindigheb town. The Soan valley is a continuation of the Soan valley of the Ráwalpindi Tahsíl, and the wells lie in clumps along the rich alluvial banks on either side of the broad bed of the stream. Water is near the surface and seldom more than one buffalo is used to work the well wheel, indeed the male buffalo is everywhere used on wells in preference to other cattle. The water-supply in the wells is very sel-

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—
Agriculture.
Fatehjang and Pindi-gheb wells—*contd.*

dom so abundant that the well wheel can be worked day and night, so that the distinction between good and bad wells depends almost entirely on the water-supply, the latter again depending on the character of the subsoil, whether clay or sand. The cautious *zamíndár* always sinks a trial boring before beginning to dig a well, and abandons his project unless he can find a spot where clay strata will not interfere with the intended cylinder. The cylinder itself is made of dressed stone, sometimes undressed stones, laid in mud, or less commonly laid in mortar. The Sil wells are next in value to the Soan wells, and differ from them mainly in the water-supply being less abundant. The wells on the Wadála stream in the Sil Soan Circle are much troubled with thick strata of hard clay; and there are few good wells among them, although the soil is in no way inferior to that of the wells on the other streams. The best of the wells on the Pindigheb Sil are all within a few miles of the town. Some of these are extremely valuable but many are sandy and inferior. The water-supply is not inferior to that of the Soan wells, but the soil is inferior, the irrigated area is larger and the Awán tenants do not take so much trouble over their lands as the hardworking peasant owners and Maliár tenants of the Soan. In the Pindigheb Tahsíl there are a good many wells along the north bank of the Soan river, which here forms the boundary between Pindigheb and the Chakwál and Tallagang Tahsíls. The Soan at this part of its course runs among wild ravines and hills, alluvial patches are few, and wells much inferior to those in the higher reaches of the Soan bed. With the exception of these well tracts, where wells are numerous and valuable, all the wells lie scattered here and there, in alluvial patches in the beds of the numerous torrents, which intersect and drain the two tahsils.

The Nandna, Bahudra and Reshi with the feeder streams of the two Sils, all have a few wells under their banks. In a few villages wells can be sunk in level lands at a distance from a torrent bed, but this is very rare, and such villages are always looked upon as remarkable. Everywhere double cropping is the universal rule on well lands and great quantities of manure are used. Without manure there can be no good well cultivation, so that the cultivator uses all his own manure and, if necessary, buys or borrows from his neighbours and from surrounding villages. Where wells are numerous, the *lipára* area is always correspondingly small and *báráni* lands generally receive less attention and suffer by comparison from neglect. The cultivation is always the best that the *zamíndár* knows; some men plough and manure and weed more than others, but all are alike to giving their most constant attention and their hardest labour. Of all the *cháhi* crops the most valued is maize and the Soan wells are famous for their maize,

CHAP. II, A. — Agriculture. Fatehjang and Pindigheb wells—concld.

which is only second to the maize of the Chhachh plain in Attock. On the best wells the yields are extraordinarily large, so much so that 50 maunds and even more per acre is sometimes yielded by a good well in a good year. Throughout the Fatehjang Tahsíl maize is the kharíf well crop and is the pivot upon which the cultivation of the year turns. A good deal of cotton is grown in the Sil Soan, but much less than enough to supply local needs. A little pepper and vegetables makes up the rest of the kharíf cropping. The maize is usually off the ground too late for good wheat crops to be sown, so barley, sown in December and January, follows the maize. In the Sil Soan late sown wheat is considered as good as barley, and is grown even more than barley. A good many vegetables, onions, carrots, &c., are grown in the rabi, but the rabi is on well land only a bye crop, and is in all respects subordinate to the kharíf. The land gets little rest ; heavy manuring, close cultivation, constant weeding and plentiful water enable two crops to be forced off the land year after year with little rotation, and with no apparent diminution of fertility. In Pindigheb, and especially in the Sil and Makhad circles, maize is not the exclusive kharíf crop. In most parts of the tahsíl bájra is more grown than maize on cháhi land, and in some villages maize is not grown at all. The reason for the neglect of maize lies more in the want of skill of the cultivator than in any other reason, but maize dislikes excessive heat, and the scorching plains and hard soil of the west of Pindigheb are not favourable to maize. The best wells of the Sil, which lie close round to Pindigheb, grow a great deal of excellent maize, which yields little less than on the wells of the Soan. Near Pindigheb there are a few wells, rack-rented by money-lenders, on which Maliárs engage to pay to the owner a lump rent of 40 maunds of maize per acre cultivated without reference to cropping, the tenant taking for himself all the crops which he is able to grow on the well in the year. It is, however, doubtful whether any such rent is ever really paid, while the wells upon which such rates are fixed are very much above the average of the wells in the Sil circle. The Makhad and Jandál wells are few and inferior, the best being close to Makhad town, where some good vegetables are grown, and close to Jand which is the principal village in the Jandál.

Tallagang wells.

The Tallagang wells almost without exception are situated in the slips of moist alluvial land which form on the banks of the torrents wherever they broaden out : water is found at a moderate depth, and the wells, roughly but strongly built of unmortared stone, cost but little to make : the expense, of course, varies greatly. The area commanded by these wells averages 2.3 acres and this too generally split up between a number of co-sharers.

The land is carefully manured : and away from tahsil headquarters manure can be had for the asking. The cultivation, therefore, is generally of a fairly high class, especially when the wells are held by Maliárs, as most of them are, but the crops grown are of inferior variety. Tobacco which is 11 per cent. of the Attock crop is only 2 per cent. here. CHAP. II, A. Agriculture. Tallagang wells—concld.

The following six crops represent together 91 per cent. of the total matured cháhi area of both harvests. The figures are percentages on this total matured area :—

KHARIF.			RABI.		
Bajra.	Maize.	Cotton.	Wheat.	Barley.	Tobacco.
34	7	7	24	17	2

The best wells in the tahsíl are on the Ankar at Tamman.

The wells are generally amply provided with cattle, owing to the sub-division of the land attached to them between several owners or tenants. They are generally worked by buffaloes, two or even one per well being sufficient : these work singly for 6 hours each irrigating about 3 kanals a day between them : on Maliár wells not less than 3 buffaloes are used, and the well is worked longer in proportion.

Changes in cultivation and wells.

The following statement will show the changes in the cultivated area and the number of wells since the last settlement. For purposes of comparison the figures taken for the last settlement are those which relate to the year from which the new assessment in each tahsil was brought into force. For the present settlement the figures of the cultivated area, as finally ascertained, after completion of measurements, have been used. This will account for the differences between these figures and those given in the Assessment Reports :—

Tahsil.	AREA.		Number of wells.
	Cultivated per cent.	Irrigated per cent.	
Attock ..	—5	+6	+798
Fatehjang ..	—4	+3	+250
Pindigheb ..	+6	+7	+262
Tallagang ..	+10	+9	+337
Total ..	+3	+9	+1,647

CHAP. II, A.
Agriculture.
Abi.

In Attock, the *ábi* land includes all land irrigated from the Haro by means of petty cuts below Sultánpur, as well as land irrigated from springs or cuts from other streams. The richest *ábi* land is that irrigated by the springs of Wah and Hasan Abdál, and this is exceedingly good. Elsewhere it is found in patches. In two or three villages it has been necessary to introduce two or more classes, but in the large majority of the villages one class sufficed.

In the Pindigheb Tahsíl *ábi* has been classified throughout with *cháhi.* It is of importance only in the Jandál circle : and even there is less than 200 acres.

Nahri.

The distinction between *ábi* and *nahri* depends on the nature of the irrigation from the Haro river, above Sultánpur, where the stream sweeps round to the south, that is to say, in the main in the Panjkatha tract, the water-supply is not perennial. The Haro is at that part of its course for a large part of the year dry, and the irrigation is not dissimilar to that from an inundation canal. With each fall of rain a freshet comes down the river and this is caught and taken on to the land. The other irrigation is all perennial, whether it is from springs or petty streams fed by springs, or below the village of Sultánpur, where the Haro becomes perennial, from the Haro itself. Here, however, only comparatively small areas are irrigated in the bed of the river, and the water is not really Haro water, but the production of springs which fall into the Haro bed just above. The term *nahri* has, therefore, been confined to the Panjkatha tract and one or two other villages down to Sultánpur, and everything else has been called *ábi.* In the villages of Hasan Abdál, Wah and Sabzpír, three crops are sometimes taken off *ábi* lands instead of two. Either the local name for the superior land has been recorded in the papers after the word *ábi* or *ábi I, ábi II, ábi III* or *ábi IV* have been entered. In several villages superior *nahri* land, which is manured or which catches the site from the irrigation channels, was found to have borne six crops in eight harvests, and has been classed as *do-fasli nahri.* The total area 1,702 acres in 1907 increased to 1,738 in 1925. In Sultánpur, where the *nahri* lands are of very varying fertility, the local names have been added to the records.

Nahri lands are confined to Attock Tahsíl, and within the tahsíl to the north-east corner of the Nálá circle, the water being derived almost entirely from the Haro. The channels have their head for the most part in the Haripur Tahsíl of Hazára, and

the Attock landowners are dependent to a large extent on the goodwill of the Ghakkar family of Khánpur for their supply. CHAP. II, A. Agriculture. Nahri—concld.

Sailáb is important in the Attock and Fatehjang Tahsils: negligible in Tallagang. In Pindigheb there are less than 400 acres. In Fatehjang and Pindigheb wheat is the principal crop: elsewhere *sailáb* crops are of inferior varieties. Matured area approximates to 74 per cent. of the cultivable throughout. Sailáb.

In the Attock Tahsil, *lipára* lands are converted as soon as means permit into *cháhi*. They are always carefully cultivated, well manured and not infrequently double cropped. In Pindigheb, owing to its rich heat it is the most sensitive class of the soil, and if rains are delayed the crops on *lipára* are the first to wither. In Fatehjang *lipára* soil is carefully cultivated and valuable. In Tallagang it does not exist. Lipára.

In the Chhachh *las* means land which is flooded by the spill from the Gandgarh range. In addition to the rich deposits which continually replenish the soil, the land being rather low-lying and getting flooded every year. retains its moisture long after the higher lands not reached by the floods have dried up. Villages containing *las* are, therefore, much more secure and suffer much less in years of drought, while in normal years the yield of the land is considerably higher than that of the ordinary *maira*. At last settlement *las* was entered in 31 villages of the Chhachh (paragraph 14 of Mr. Butler's report) and the classification then adopted has in general been retained. Elsewhere *las* means embanked land. This is usually in ravines, or depressions, and receives the surface drainage and a certain amount of moisture by percolation from the lands above. During heavy rain a good deal of silt is washed down into this *las* land and enriches the soil. The difficulty is, however. that the *bands* which retain the water frequently breach and require a good deal of labour to repair. When such a breach occurs the land becomes almost worthless, as it is soon eaten away by the water running through the breach and in any case it loses its moisture. As long as the *band* remains, this land is better than ordinary good *maira*, but not as good as the *las* of the centre of the Chhachh. Owing to the initial expense of making the *bands* and the constant labour of keeping them in repair it is ordinarily assessed at only about the same rate as good *maira* land. Las.

Hail is the term used in the Tallagang Tahsíl for what is called *lipára* in the other three tahsils: but 100 acres of *hail* land produce on an average 84 acres of matured crops per annum. It is thus Hail.

CHAP. II. A. — Agriculture. Hail—concld.

more profitable than *sailáb* or any of the other classes of *bárání* land. It grows less wheat: but more *bájra* and fodder than the other unirrigated classes of land.

Báráni.

This also is peculiar to Tallagang. The class comprises 7.1 of the cultivated area in the tahsíl, 61 per cent. of the area cultivated on the average come to maturity. The soil of this embanked land is enriched by deposits of silt washed down from higher lands during rain-storms. It is consequently firmer and more fertile than the average *maira* and more suitable for *kharíf* crops.

Maira.

Maira varies a good deal in quality. In parts, where it is light and sandy, usually only *rabi* crops are grown. Where it is terraced, the soil is often somewhat firmer, though less so than in the case of the *báráni awal* land. The firmer land is reserved for the *kharíf* crop. Even this land, however, is sometimes cultivated in the rabi as the *zamindár* is quite alive to the fact that the *rabi* crop is more remunerative. In *báráni* land in general if there is a choice it is between two systems of cultivation. One is the *do-fasli do-sála* system in which the *rabi* crop, usually wheat or gram, is followed by a *kharíf* crop which may be *bájra* or fodder. The land is then left fallow for two harvests, and ploughed fairly regu'arly. The other system which is more common is to keep the kharíf and rabi land separate, the lighter, as mentioned above, be ng kept for the rabi and the firmer for the kharíf Wheat is usually sown in the rabi land for a year or more in succession, after which it gives place to gram. *Táràmíra* is often sown directly after the *kharíf* crop, when the latter has failed. In the lands reserved for the *kkaríf bájra* is usually sown, but occasionally it gives place to jowar, pulses or fodder. The lighter rabi lands are usually ploughed twice for wheat and once for gram. The firmer soi's get rather more attention.

On a general average 100 acres of *maira* produce 61 acres of matured crop: and the *kharába* rate on the sown area is 25 per cent.

Rakkar.

One hundred acres of *rakkar* produces on an average only 52 acres of matured crop per annum, and the average percentage of *kharába* on sown is 33—this in spite of the fact that only in a year of good rainfall is this kind of soil cultivated at all. The usual crops on it are *táràmíra*, and less frequently pulses and wheat.

SILO.

Seasons in Tallagang seem to run roughly in a three-year cycle, one good, one bad and one medium. The problem is to

carry fodder from the good over to the bad year. In a good year much is wasted : and in a bad, the cattle are sold for a song. Silo has been suggested and would prove a remedy, but expert supervision is hard to come by and visits from agricultural experts particularly in these inaccessible tracts few and far between. Still the idea has been implanted. Successful experiments have been made by the District Authorities—in one year 159 pits were made—and if the scheme can be encouraged it may prove the salvation of those peasants who live on the margin of subsistence. CHAP. II. A. — Agriculture. Silo—*concld.*

THE BUDHI SYSTEM.

The *budhi* system is only found where land is plentiful and generally only where it is fairly firm. The stiffer soils are generally kept for kharíf cultivation and after three or four years they become exhausted, *i.e.*, "budhi." The land is then left fallow for two or three years and the rain water coming on to it is conducted off on to other land. When, as is usually the case, the land is terraced this is easy. When it is fairly level, small shallow channels are dug to assist the flow. Land left fallow in this way often produces a very good crop of grass during the first year or two.

AGRICULTURAL OPERATIONS.

In the various months of the year the cultivator's time is taken up as follows :— Cultivator's engagements.

In January, from 15th Mágh, he commences ploughing for the next autumn and the following spring harvests, and takes on his agricultural servants.

Ploughing goes on for the next month also, and by the end of it some of the *Sarson* and young wheat is ready to be cut for fodder.

In Chet (March) ploughing still goes on, and melons and pumpkins and cotton are sown.

In Baisákh (April) ploughing proceeds ; *moth* is sown, and *sarson* and *tárámira* are cut as well as barley and gram, and in the hotter tracts some of the wheat.

In Jeth (May) some ploughing is done, and the wheat is cut, and some of it garnered.

In Hár (June) some ploughing is done, and the remainder of the wheat threshed and garnered, and, except in manured lands, maize, *bájra, jowár*, and *múng* are sown.

In Sáwan (July) much ploughing is done, and the manured fields are sown with maize, *bájra*, etc.

In Bhádon (August) much ploughing for the ensuing spring harvest is done, and ploughing is done between the stalks of

CHAP. II.A. — Agriculture. Cultivator's engagements—concld.

growing crops of *bájra*, *makki*, etc., and green grass is brought in for the cattle.

In Asúj (September) wheat, gram, *sarson*, and other spring crops are sown, and much of the *bájra*, *makki* and *jowár* is cut.

In Katak (October) sowing for the spring harvest still goes on, and the *moth*, *múng* and *másh*, hemp and similar crops are cut and garnered.

In Maghar (November), should rain fall seasonably, the *lipára* lands which have just yielded an autumn crop, are sown with spring crops.

In Poh (December) there is little field work done. Hemp is picked and daily labour frequently undertaken.

Sowings.

The time of sowing the winter crops is a little later than in Ráwalpindi Tahsil so that the plants may not come up till they are ready to withstand drought. It is remarkable how late sowings can take place. Rain in the beginning of January is not too late for the winter crop. *Lipára* is always the last to be sown in the rabi and barley is then a very favourite crop. All kharíf sowings are broadcast, and, except in irrigated lands, all rabi sowings are by drill (*náli*), a hollow bamboo attached to the plough share by the handle, and fitted with a wide wooden mouth which is kept supplied with seed by the ploughman. After sowing the field is levelled by the *sohágá*,—a heavy flat beam drawn over it by bullocks, the driver standing on the log to increase its weight. The *sohágá* is more usually called *majh* or *maira*.

Ploughing.

In the Chhachh the cultivation is nearly always excellent. Where the *do-fasli do-sála* system is followed the land is ploughed 10 or 12 times before the wheat is sown. In other cases it is usually ploughed four times for wheat, twice for barley and gram and once for *moth*, *múng*, *tárámira*, etc. In the Sarwála the cultivation is rougher. The light sandy soil of the centre and much of the north of the circle requires very little ploughing and probably gets sufficient. The stiffer soils to the south want more, and do not always get it, as the tenants find they can employ their time more profitably doing other things. In the Nála, the rather firm loam requires more ploughing than that of the Chhachh. The owners themselves are usually industrious, but the weak point is the large area cultivated by occupancy tenants paying at *batái* rates. Many of these, especially in the village near the Grand Trunk Road and the road to Abbottabad, neglect their ploughing for the carrying of trade, etc., while all over the circle most of the *bands* which make the *las* land are in a chronic state of disrepair,—a striking contrast to the excellently designed and beautifully kept *bands* of most of the Tallagang Tahsíl.

Ploughing—*concld.*

Except on the *cháhi* and *ábi* land and on the *las* and better *maira* of the Chhachh very little systematic weeding is done. It is true that in the winter one continually sees children out in the fields pulling up thistles and other indigenous plants, but these are only collected for use as fodder for the cattle, and it is doubtful if the practice benefits the crops to any appreciable extent.

Elsewhere in the district as many ploughings are given on the irrigated and also on the better unirrigated soils as the cultivator can afford. A good farmer will turn over the soil ten to twelve times: the depth of the furrow being deeper as the soil is heavier. A field is ploughed from the outside in. The furrow always turns counter-clock wise, so that the right hand bullock should be the stronger of the two.

Attempts have been made to introduce the iron plough: success varying with the industry of the Agricultural Assistant and the interest taken by the Revenue officials from the Deputy Commissioner downwards. For reclaiming the old Hatti Jhíl, recovered from the Chel, the iron plough was essential.

Bullocks are sometimes supplemented by cows: even cows in milk: but from 1926 a movement started having the abolition of this practice as its object,—a movement in which the wiser *zamindárs* joined hands with the cattle-loving Hindús.

Weeding.

Hand weeding is never done except on wells, though certain weeds useful as fodder or otherwise are collected in their season. The only weeding done on rain lands is when in August *bájra*, cotton and the other *kharíf* crops are ploughed over after good rain, to thin them and open out the ground. Of this operation, which is known as *sil*, it is said that it ought to be done by an enemy: for the benefit derived from it is in proportion to the violence with which the crop is treated.

MANURING.

Manuring General.

The manure used consists of house-refuse, cattle-dung, the droppings of sheep and goats, old straw which has mildewed or rotted from keeping, ashes and earth-salts. The fields lying near the homestead, which is usually raised above the surrounding soil, get manured by natural drainage and as a result of the habits of the people. Fields at a distance are artificially manured, the manure being carried to the fields, distributed over them, and then ploughed in. The droppings of sheep and goats are considered the most fertilising of all manures. Wherever there are irrigated lands they get the bulk of the available manure. The manure is thrown out on the ground first out of sacks, is then spread over it with the *jandra* or wooden spade, and is then ploughed before

CHAP. II. A. Agriculture. Manuring General—contd.

the crop is sown. Manure is also put into fields when the crop has come up. In the case of sugarcane and melons, ashes and *kallar* are used in this way.

The importance attached to manuring varies throughout the district. In Attock Tahsíl, especially in the Chhachh, the cry everywhere is manure. The lack of manure is the only bar to the extension of well cultivation. In the dry parts of Fateh-jang and Pindigheb, the available manure is used, but except when the rains are unusually favourable it is not considered of much value. The people say that manure in very dry seasons only burns up the crop. In the Gazetteer of 1907 it is written—

"In the east of Tallagang manure is used, not indeed with the same care as in Attock; but in the hotter and drier parts of the tahsíl, manure, except so far as needed for the wells, is treated as so much dirt thrown down the cliff or hillock on which the village generally stand, to be washed away in time into the torrent bed below. In these dry and thirsty soils manure is said to burn up the crop, and no doubt it does have a bad effect; its heating effect is recognised even in the cooler parts of the tract, it being considered dangerous to manure the *kharíf* crops in dry land, as the heat they have to withstand is so great: and there is little need to do so, as the effect of manure put on in the rabi continues over the next harvest at least, even on the light sandy soils where it is most evanescent. Nevertheless, the fact remains that here and there one finds a thrifty village which manages to use its available manure by putting it on the right kind of land, so the cause of the waste seems to be partly laziness; one would think that the dung would be used for fuel if for nothing else, especially as firewood is by no means plentiful, but even this use is seldom made of it." Mr. Barry remarks some, but no great improvement in this respect.

Unirrigated *lipára* lands get from 80 to 100 maunds per acre in the year in which they are manured, but no very accurate average can be struck, as the amount of manure available for any particular field varies very much according to the circumstances, the number of cattle possessed by the owner, the distance of the fields from the homestead, and the nature of the crop intended to be sown, all affecting the question.

Of manure in his Assessment Report on the Attock Tahsíl Mr. Barry writes as follows:—

Cost of manure.

"The cost of manure for the irrigation in this tahsíl is such an important item that it has been necessary to go into the question in some detail. It varies considerably in different tracts.

CHAP. II. A.

Agriculture.

Cost of manure—contd.

Where there is little irrigated land and cattle are plentiful, it is cheap. Where wells are numerous and highly cultivated, especially if the lack of grazing-grounds makes it expensive keeping a lot of cattle, manure is dear. For the whole of the tahsíl, except the portion bordering on the Kála Chitta range, there is a permanent shortage of fuel. So great is the demand for it in the Chhachh that the people dig up the dried roots of the maize and jowár in the winter and stack them for burning. As has already been explained, Mr. Butler, for the purposes of his village notes and assessments, divided each circle up into groups. The eight groups of the Chhachh are shown in one of the maps at the end of the report. Groups III to VI are the *las* groups. Broadly speaking, they are the villages in the neighbourhood of Hazro which get the benefit of the Gandgarh spill; 89 per cent. of the tobacco of the circle is grown in them. Groups I and VII lie along the Indus. Their soil is mostly light and sandy as these villages have in most cases been damaged by the great floods of 1841. Groups II and VIII are intermediate, both as regards position and the quality of the land between the Indus groups and the Hazro block. Manure is usually stacked inside or around the village *ábádi* and is then taken out to the well land on bullocks. A very wide, open, shallow sack is used, which is put on the bullock's back, and contains a maund to a maund-and-a-half of manure. I have found it convenient to take one sack-load as the unit for working out the price. In the Hazro villages the present price of ordinary cattle manure is from 2½ sacks to 3 sacks per rupee according to the quality, the older stuff being better and more expensive. In the rest of the Chhachh the price varies from about 4½ to 6 sacks per rupee. In the Sarwála circle the price of manure in the villages in the north-east corner bordering on the Chhachh is about the same as that of the Hazro villages. For the *cháhi* land along the Grand Trunk Road it is rather less, being about 5 or 6 sacks per rupee. Round Campbellpur it is still cheaper. The cantonment there usually contains a battery and the whole or part of a divisional ammunition column. Though the land on the wells near Campbellpur is heavily manured, the area is not very large, so there is never a shortage, and the price is about 10 sacks per rupee. Coming to the Nála circle, the Saggar tract is the only part where wells are abundant. The villages there, however, have extensive grazing grounds and large herds. The price of manure is about the same there as in the west of the Chhachh, *i.e.*, 4½ to 6 sacks per rupee. For the rest of the Nála circle 10 sacks per rupee may be taken. Hasan Abdál is the only place where there is a large demand for it, and there the weekly cattle fair and the large number of bullock carts always found

CHAP. II. A. Agriculture. Cost of manure—concld.

resting by the roadside increase the supply. If there is any deficiency, plenty can be obtained from the surrounding villages, which have good grazing and very little irrigation.

Quantity of manure used.

The quantity of manure used for different crops varies of course very considerably, and it has not been easy to arrive at any accurate conclusion as to the actual amount. The inherent mendacity of the average *zamindar* when questioned about agricultural matters during settlement is nowhere more marked than in his statements about the amount of manure he uses. Fortunately the village inspections were carried out when the manure was actually being put down, and I was able to measure up roughly a considerable number of fields and count the heaps on them. These personal observations were also supplemented by the usual enquiries, and in some cases I think fairly reliable estimates were given to me.

Manure for snuff tobacco.

For snuff tobacco, and frequently also for *paundah* cane, the ordinary cattle manure is not rich enough, and sheep and goat manure has to be imported. Some of this comes from the hamlets on the slopes of the Gandgarh mountain, which possess large herds. The rest is mostly imported from the Kala Chitta villages on camels and sometimes comes even from the Fatehjang Tahsíl. The price varies with the price of snuff tobacco. It is cheaper this year than it was last owing to the slump in tobacco prices generally. Usually a camel-load costs about Re. 1-8-0 or Rs. 2. I saw it on the ground in many fields in the Hazro villages and made numerous enquiries into the cost. Excluding those which were obviously unreliable, the average of the others works out at Rs. 34 per kanal, or Rs. 272 per acre, which figure I have decided to adopt.

Manure for ordinary tobacco.

The mean of a number of personal observations and enquiries in regard to the amount of manure used for ordinary tobacco sown after maize and usually followed by maize works out at 37 sacks per kanal in the Chhachh. The cost of this at the rates mentioned above comes to approximately Rs. 120 per acre in the Hazro villages and Rs. 70 in the rest of the Chhachh. As nine-tenths of the tobacco in the Chhachh is grown in the former, the average for the whole circle will thus come to Rs. 115 per acre. In the other two circles the manuring is not quite so heavy. Thirty sacks per kanal may be taken as the average. In the Nála circle this gives an average cost of Rs. 48 per acre for the Saggar tract and Rs. 24 per acre for the rest. About two-fifths of the *cháhi* tobacco of the Nála circle is grown in the Saggar tract so the all-round rate for the circle works out at about Rs. 33 per

acre. In the Sarwála circle the average worked out in the same way comes to about Rs. 42 per acre.

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Agriculture.

Cost of manure for sugarcane.

Paundah cane is grown only in the richest lands in the Chhachh and in the villages of Hasan Abdál and Wah. Usually onions and cucumbers are sown in January or February, room being left between the lines for the cane. Just before the vegetables are ready the cane is put in. For these two crops the manuring has to be heavy. I have put it at Rs. 160 per acre in the Chhachh and Rs. 80 in the Nála. For *kahu* cane about 30 bags of ordinary manure per kanal are used. This costs about Rs. 10 per kanal in the eastern Chhachh and Rs. 6 per kanal in the western, with an all-round rate of Rs. 60 per acre.

Cost of manure for wheat and maize on cháhi land.

For wheat (or barley) the usual practice is to put down the manure in January just as the crop is coming up. This usually suffices for the wheat and the maize or *chari* grown after it, if any. In the case of maize grown after tobacco, no extra manure is required. The average cost of manure for wheat comes to Rs. 40 per acre in the Chhachh, Rs. 28 in the Sarwála and Rs. 24 in the Nála.

Cost of manure for vegetables, etc.

"Others" being practically all vegetables, melons and spices the cost of the manure is about the same as in the case of ordinary tobacco.

For the sake of convenience, these rates are collected in the table below :—

Crop.	Average cost of manure per acre for different crops grown on chahi land by assessment circles.		
	Chhachh.	Sarwála	Nála.
	Rs.	Rs.	Rs.
Snuff tobacco	272	272	..
Ordinary tobacco	115	42	33
Paundah cane	160	..	80
Kahu cane	60	42	..
Wheat or barley	40	28	24
"Others"	100	40	33

CHAP. II, A.

Agriculture.

It was shortly after this report was written that the initial experiment with artificial manure, referred to more fully *infra* (*vide* tobacco cultivation, page 183) was made.

Reaping.

Reaping of grain crops is done with the *dántri* or sickle. Ratooning cotton is also cut with the sickle, but when it is desired to rotate the crop, the cotton roots are dug out with the spade.

Threshing and winnowing.

The grain, in the case of spring crops such as wheat and barley, is threshed out by means of large bundles of thorns, which are weighted with stones (*phálláh*) and dragged over the grain by cattle driven round and round as it lies on the threshing-floor (*khalára*). The threshing-floor is a small space in one part of the field carefully levelled and then moistened and pressed down by the feet of flocks of sheep driven over it, after which some crop of little value is first threshed on it and after it has been thus cleansed, it is ready for more valuable crops.

The autumn crops are trodden out by the feet of cattle driven round and round on the threshing-floor, which is smaller than that used for spring crops. The grain which has been threshed out is next winnowed, as soon as a day occurs with sufficient wind to carry out the operation.

The winnowing is done first with the *tringáli* or pitch-fork and then with the *phio*, a flat spade-shaped instrument, and consists simply in throwing the grain and chaff straight into the air; the wind blows away the light chaff, the grain falling back on to the heap. The *chhaj*, or winnowing basket, is not used much for sifting grain. *Bájra* is the crop in connection with which it is most commonly employed.

After the winnowing is complete, if the crop has been grown by a tenant, the owner's and tenant's shares are separated off at the threshing-floor, and the dues of the village artizans are paid at the same time. The owners of the crop are usually at this time also much pestered by beggars, to whom it is the practice to give small portions of the grain and straw.

Embanking.

In all tahsíls embanking is of much importance. Large embankments are constructed by calling in all the neighbours to help. The smaller embankments are made by the cultivator himself, sometimes with the aid of hired labour. Embanking and levelling are done with the *karráh*, a large wooden shovel drawn by bullocks and held by the owner. Beginning at the top of the field the peasant drives his oxen towards the lower end, holding

the *karráh* down so that it gets filled with earth. At the lower end the *karráh* is lifted, and the earth deposited on the embankment. The process both levels the field and raises an embankment at the lower end which retains the drainage water. CHAP. II, A — Agriculture.

AGRICULTURAL IMPLEMENTS.

Agricultural implements are of the usual types. The ploughs (*hal*) are light and similar to those used in other parts of the Punjab. There is no tendency to replace them by any other. The ploughshare (*kur*) is a strong flat piece of wood, broad at the back and centre, but gradually tapering to a point, called *phála*. Into the middle of this fits the shaft (*hal*) from which it takes its name. The wood-work of the plough is usually of olive, *phulah*, *kikar*, *khair*, or *shisham*.

Other implements used in agricultural pursuits in this district are—

Panjáli or *joot* (yoke), made usually of light wood, Persian lilac or bamboo, for yoking oxen to the plough or harrow.

Nári (traces) of leather, for attaching the yoke to the plough, etc.

Trát (whip), a whip with wooden handle and leather lash for driving oxen. *Choka* (goad) of wood, with iron point. *Maira* or *majh* (harrow). This is a flat board, some ten inches broad and eight feet long. A pair of oxen is yoked to this, and the driver stands on the board and drives them over the field to level it before sowing after ploughing: usually made of *phulah*, *tút* or pine wood.

Karráh (earth-board), a large flat board with teeth at the lower end. Drawn by bullocks, and used for levelling fields by dragging earth from higher portions on to the lower, made of various woods, *khair*, *phuláh* or *tút*: much used in this district.

Jandra or *jandri* (earth-board), similar to the *karráh*, but smaller and drawn by hand instead of bullocks. Requires two men to work it, one to hold it down, the other to drag it.

Khopa (blinkers), coverings placed over the eyes of bullocks or buffaloes when working Persian wheels.

Chhikka or *topa* (muzzle), made of string, placed over the noses of cattle to prevent their eating the crops; also used to prevent calves from sucking.

CHAP. II, A.

Agriculture.

Náli (seed pipe), a pipe, headed by a cup, attached to the back of the plough, through which the seed is allowed to fall.

Trangar, open net for carrying straw or grass.

Ghomani or *ghomat* (sling), used for frightening birds, etc.. off the crops.

Mánnáh (platform), a high platform, with bed of string, placed in the fields when the crops are ripening for the watchers to sit upon.

Phálláh, a bundle of thorny branches pressed together and loaded with stones, dragged by bullocks over the crops to break the husks and chop up the straw.

Tringli (pitch-fork), used for throwing up the mixed grain and chaff into the air to separate them.

Phio, a flat spade, used for throwing the grain into the air after it has been already sifted by the *tringli*, to further divide off the actual grain from chaff and dust. The blade is usually made of *shisham* carefully planed, the handle of bamboo or light wood.

Chhaj (winnowing basket), shovel-shaped basket, the smaller kind is used for winnowing grain, the larger for sifting refuse.

Salanga or *satánga* (pitch-fork with two prongs), a rough wooden pitch-fork, chiefly used for lifting bundles of thorns in making thorn hedges.

Kandáli or *kundala* (for digging holes), shaped like a straight narrow spade, made of wood with iron blade.

Kahi (spade), a spade with blade at right angles to the handle.

Kohári, *kulhári* (axe).

Dántri or *daráti* (sickle), sickle for cutting crops, etc.

Ramba or *khurpa* (trowel), this is a small trowel or hoe, with a short handle.

Toka (*chaper*) is used to stack fodder for animals.

Tokra (basket), a large basket for carrying manure.

Bora, open sack of rough rope for carrying manure, earth, etc., on beasts of burden.

There is little sugarcane grown in this district, except in the Chhachh. The old sugar-mill or *kohlu* is not met with; the Behea sugar-mill being almost universally employed. Those *zamindars* who grow sugarcane, but have no mills of their own, hire those of their neighbours at one rupee per day of 24 hours.

Oil-mills, known as *ghání*, are used to press oil from *sarson táramíra* and other oil-seeds. These are constructed of wood usually of *shísham*, *tút* or *phulái*, and consist of a circular receptacle of wood, made strong and bound at the top with iron, in which the grain to be crushed is placed. At the bottom of this is a small outlet for the oil to escape.

In the centre of the receptacle a heavy wooden crusher evolves, being yoked by a beam at right angles to itself to an ox or buffalo. The horizontal beam is weighted with stones, and as the animal paces slowly round, grain is pressed between the vertical crusher and the sides of the circular receptacle, the oil is squeezed out and escapes below. This is the usual form found throughout the province, and it is to be met with in nearly every village in the district. It costs about Rs. 35 to make on the average. It is still occasionally but very rarely used for pressing sugarcane; the *belna* or Behea sugar-mill being now commonly employed.

ROTATION OF CROPS.

The account given of cropping on various classes of soils will have shown to what extent rotation of crops is practised. The *do-fasli do-sála* system is, when strictly adhered to, essentially a system of rotation. Where the other system prevails the rabi land usually bears wheat year after year, varied every third or fourth year in Tallagang by a crop of gram put in to rest the soil which its nitrogen producing properties enable it to do. But a long succession of gram crops is also considered harmful, and is varied by wheat now and again. The rotation of crops is strictly observed on well lands. But beyond this no special attention is paid to rotation. Certain crops are, however, supposed to do particularly well following certain other crops, as, for instance, wheat after *moth*, and gram after cotton.

GENERAL REMARKS ON AGRICULTURE.

The following general remarks on the standard of cultivation are quoted from the Settlement Reports of Tallagang and Fateh-jang and Pindigheb.

CHAP. II, A.

Agriculture.

Tallagang.

Mr. Talbot wrote :—

" Much of the slovenliness of cultivation which strikes one at first sight is more apparent than real : the *kharíf* land, for instance, in many parts of Tallagang and elsewhere has a very slipshod appearance, being thickly studded with clumps of grass and brushwood, the latter chiefly the dwarf *ber* : these are carefully avoided in ploughing, for the grass, of course, is useful, and the shrubs, cut down every winter, yield firewood, and in addition their leaves dried and separated from the stems provide a most valuable fodder, which in some villages is sold to great advantage. On the whole, as observed by Colonel Wace in paragraph 49 of his Assessment Report, the agriculture of the tract, rough as it is, is well adapted to its circumstances, and its methods are often the necessary consequence of the largeness of the areas dealt with : improvement seems certainly possible, in the fuller use of manure, and greater attention to weeding—where needed (which it hardly is on the sandier soils)—and, more important than either, in the gradual levelling up and terracing of the sloping *maira* land, in which respect much might be done. Gradual improvement is no doubt taking place in this direction and will continue to be effected as population becomes denser, and the supply of new land for cultivation begins to fall."

About Pindigheb and Fatehjang Mr. Kitchin wrote :—

Pindigheb and Fatehjang Tahsíls.

" The cultivated area per plough is so large that the same amount of ploughing cannot be given as in the Ráwalpindi District. Generally there is more land than cultivators, and the cultivation being in the hands of tenants they have not the same inducement to careful plodding labour as have peasant owners. The well cultivation in the Sil Soan and the cultivation of the best *báráni* lands in that circle is as good as could be desired, but with that exception the cultivation falls far short of perfection. Many of the owners are hard on their tenants, especially the owners who are themselves weak and impoverished, and there is small advantage in labour when the fruit of the toil is carried off by another man. In very few villages are the tenants numerous enough to do full justice to the land.

" The cultivation gets more and more careless towards the west as the fields get larger and the climate drier, until in Makhad the cultivation is very slovenly. The Pathans of Makhad are not bad cultivators, but they have not the patience to continually plough and embank the same field, so they prefer to keep large

areas under cultivation and by changing from field to field they get the same total produce which a closer cultivator could get of a much smaller area. The Pathán sepoy when he comes on pension invests his savings in a huge embankment, while he sits down to enjoy the produce of his labour. The Awáns of the Awán tract of Pindigheb are fair but not good cultivators, and have something of the slovenly ways of the Pathán. Khattars everywhere are bad, Jodhrás, when they cultivate themselves, are little better, while the Gheba still finds his occupation in driving tenants and is seldom reduced to working himself.

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"Among the tenants and among owners there is still a great deal of co-operation, and the custom of calling in all the neighbours to help in embankments, or in any special work still prevails, the cost of feeding them being the only cost involved. The large owners all claim the right to call out their tenantry whenever they think fit, and this right wisely exercised is of great use in breaking up new lands, or in improving old lands."

Population engaged in agriculture.

Practically the whole population resident in the villages and a large proportion of the urban population is either engaged in or dependent on agriculture. The proportion of the population which is actually engaged in cultivation is approximately two-thirds.

The demand for labour is considerable only at harvest time, especially at spring harvest. The chief source of supply is the menial classes, who join in all the harvesting operations, and also assist when any special work is undertaken. Men of the agricultural tribes and Kashmiri and Pathán immigrants are also available. The latter enter in the district in time for the autumn harvest and stay out the winter. They are often employed in the construction of embankments. During the hot weather there is little demand for labour, and indeed a portion of the agricultural population is accustomed at that time of year to seek employment elsewhere. But especially at the rabi harvest outside labour has generally to be employed, for the cultivating holdings are too large for the tenants to reap all the crop themselves when the harvest is at all good. The expense is not great, for there are always plenty of people who work for their food only, and the tenants help one another.

PRINCIPAL CROPS HARVESTED.

Percentage area harvested.

26. In the table below the areas of the chief crops harvested have been shown in the form of percentages on the total matured

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area of the year. The averages for the selected years of this settlement and the last have both been given for the sake of comparison :—

Crop.	Attock. 1907.	Attock. 1927.	Fatehjang. 1907.	Fatehjang. 1927.	Pindigheb. 1907.	Pindigheb. 1927.	Tallagang. 1907.	Tallagang. 1927.	District. 1907.	District. 1927.	Remarks.
Maize	8.7	9.6	3	3.1	1	1.1	..	.2	3	3	For the Tallagang and Attock Tahsils the number of selected years in last settlement was 6 and 7, respectively, as compared with the 10 years period sanctioned for the present settlement. For Pindigheb and Fatehjang the number of those years has, however, remained the same. Any change in the number of selected years affects the calculation of percentages.
Jowár	3.5	1.0	3	1.8	4	2.3	4.5	2.3	3	1	
Bájra	9.6	7.9	29	25.4	20	16.8	13.3	13.3	17	16	
Múng	2.4	2.2	2	2.9	..	.3	6.1	.2	4	3	
Moth	2.2	1.4	2	2.3	3	3.0	(with Múng)	3.6	(with Múng)	(with Múng)	
Cotton	1.7	0.9	2	1.8	2	1.5	4	1	..	..	
Sugarcane ..	1.1	0.6	..	..	..	..	..	..	..	..	
Other kharif crops ..	..	3.4	1	1.0	1	1.4	.8	2.4	1	2	
Total ..	29.2	27	42	38.3	31	26.4	28.7	23	32	28	
Wheat	42.5	51.0	42	48	43	53.5	51	59.0	45	53	
Barley	7.1	5.5	4	3.6	4	4.2	1.2	1.7	4	4	
Gram	9.3	5.1	1	1.1	14	8.4	13.9	11.6	10	7	
Táramíra ..	6.9	5.7	9	6.5	7	5.9	4.3	4.1	7	5	
Tobacco ..	1.6	1.9	..	..	..	..	..	..	..	..	
Other Rabi Crops ..	3.1	0.8	2	2.5	1	1.6	.9	1.0	2	2	
Total ..	70.5	73	58	61.7	69	73.6	71.3	77	68	72	

It would thus appear that in the district rabi has increased at the expense of kharíf. CHAP. II, A. — Agriculture.

Wheat is by far the most important crop in the district. The cultivation of sugarcane is being replaced by the more valuable crop of tobacco. Gram cultivation is going down on account of constant disease. There has, however, been a tendency on the part of partwaris to allow more *kharába* in recent years, more especially in the Attock Tahsíl. The crops classed as "other kharíf and rabi crops" are chiefly *sarshaf*, fodder, melons, vegetables and spices. The cultivation of vegetables has increased round Campbellpur owing to the location of the headquarters of the district and the sinking of new wells. *Táráміra* shows a decline everywhere. *Moth* and *mung* have also decreased, more especially in Tallagang where wheat has taken their place.

Since the last settlement the cultivation of maize has increased slightly both in the Attock and Fatehjang Tahsíls. In Attock it is grown on well lands of the Chhachh, and also on the sailab of the Chel as well as on the rain lands of the Nálá and Sarwála circles. It is the most important of the irrigated kharíf crops in Pindigheb and Fatehjang. In Tallagang it has begun to make its appearance. Yields in Pindigheb are sometimes very heavy indeed. In 1925 a well in Ikhlas gave 31 maunds to the acre. Fixed grain rents in Bandi have been based on an assumed yield of 27.4 maunds per acre. Maize.

With the increasing pressure on the soil and the steadily expanding demand for food grains to satisfy the requirements of the larger population, it is probable that more attention will be paid to the cultivation of the *cháhi* land than was the case in the past. In the Attock Tahsíl an American variety is sown in May and June and reaped in July and August. In other parts of this tahsil and elsewhere in the district the usual varieties are the white and the yellow (*chitti* and *pili*). This is sown between July and August and reaped about the end of October.

Jowár or great millet is grown on all classes of land, but chiefly on *maira*. A good deal is sown on the Sarwála *sailáb*, the Chel lands. On the whole, more *jowár* is grown than maize. Everywhere it is grown exclusively for fodder, and is sown thick. The area under this crop tends to increase as the grazing grounds contract with the advance of cultivation. It also yields some grain if allowed to ripen, but it is seldom left to mature. It is grown very easily, gives no trouble, and with favourable rains yields a good return; but it succumbs to drought more easily Jowár.

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than *bájra*. For this reason it is generally grown on good lands. The succulent stalks provide an imperfect substitute for sugarcane for chewing.

Bájra.

Except in Tallagang the cultivation of *bájra* shows a decline everywhere, and is being replaced by wheat owing to the steadily increasing demand for food. It has almost disappeared from the Chhachh, but is still very important in the Nálá circle in the Attock Tahsíl. In the Nálá circle the success of the agricultural year depends on the *bájra* harvest for the grain is the principal food of the people and the stalks of the cattle.

Sowings take place in the latter half of May and in June or after the first heavy rain of the monsoon, and the crop is cut in September and the first half of October. The seed is about 2 seers per acre sown broadcast. The best *bájra* is grown with the stalks well apart from each other, so that the plough can be run between in August.

A common agricultural proverb on the proper method of growing various crops runs as follows :—

Moth supatial
Til ghane
Dád tráp jowár
Githon utte bájra
Dalánga utte bár

which signifies that *moth* should be grown with the plants at a distance from each other ; *til* with them close together ; *jowár* stalk at a frog's leap distance from each other ; *bájra* stalks a span apart and cotton stalks separate one pace from each other.

When the crop is ripening great care is taken to protect this and other kharíf crops from birds, a platform (*mannah*) of wood or dried mud being erected, on which some one sits all day to guard the crops. The ears (*sitta*) are often plucked and roasted as soon as the grain forms. The average outturn is usually decidedly lower than that of wheat.

Pulses.

Pulses are, at least in area, second in importance among the *kharíf* crops to *bájra* alone. They are *mung*, *moth* and *másh* (*Phaseoleus mungo, aconitifolius* and *radiatus*). The last is not common. In Attock Tahsíl *múng* is slightly more popular than *moth*, but south of the Kála Chitta the former is grown, in any quantities, only in the Sil Soan circle of Fatehjang Tahsíl. Generally more *moth* is grown than *mung*, and especially in Pindigheb. These pulses are confined to the poorer rain lands. *Moth* in particular is an inferior crop grown in inferior land. They are nearly

always grown as a mixture with *bájra*, *chari* or cotton, and are sown immediately after rain in April. They are easily grown and require little labour. In the Chhachh pulses take the place of *bájra* which is hardly grown at all. **CHAP. II, A. Agriculture. Pulses—concld.**

Móth is valued as food for horses and cattle. The grain is an excellent substitute for gram, and the straw makes good fodder. *Múng* and *másh* are used only as vegetables or *dál*. Neither crop is of much importance.

Cotton has declined. It was never cultivated commercially; only for immediate use; and with the increase in communications home-weaving has tended to decline. Experiments were made in Jatial on land reclaimed by the Chel Drainage Scheme, and proved most promising. When locusts permit it is probable that there will be a big revival of cotton on these *sailáb* lands. **Cotton.**

This is grown only in Attock, and cultivation has decreased by 45 per cent., the crop having been replaced by tobacco. The more valuable kind of sugarcane known as *paundah* is now-a-days not used for the extraction of gur, but is cut up into pieces for chewing. Practically all the cane grown in the Nála circle is of this kind. Some of the best wells near Hazro also grow it, but in the rest of the Chhachh *kahu* is grown. In the Sarwála circle the amount of *paundah* cane is negligible. At last settlement Mr. Butler put the value of this crop in the Chhachh, when sold standing, at Rs. 200 per acre, and he allowed a deduction of Rs. 16 for seed, leaving Rs. 184. In the Nála circle he took Rs. 120 to allow a margin. Prices certainly seem to have risen a good deal since then. Ordinarily a kanal of *paundah* cane in 1925 sold for Rs. 60 to Rs. 70. Sometimes in the best land Rs. 80 or more is obtained. **Sugarcane.**

The price in the Nála circle appears to be about the same as that in the Chhachh. As practically all the cane is grown on the rich *ábi* lands of Hassan Abdál and Wah, there is no reason why the Nála cane should be any less valuable.

Kahu cane is used mainly for the extraction of gur, and gives a yield of 32 maunds of gur per acre.

A *bárání* variety of sugarcane has been introduced by the Agricultural Department. In 1926 1/8th of an acre was grown and in 1928 this had extended to some 15 acres, but the ravages of locusts have put back the growth of the crop.

Wheat is the principal crop of the district representing 53 per cent. of the total cultivation. It is usually the first crop after the fallow and is not sown after a *kharif* crop even in *lipára*. The best time for sowing is early October, but if there is not sufficient moisture then sowing can be delayed even till January **Wheat.**

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though the stalk on such occasions is insufficient. Generally the *zamíndárs* think they cannot have too much rain while the crop is in the ground. This notwithstanding, of all crops, it is most tolerant of drought, provided there is plenty of moisture to give it a good start at the outset. Rains in *Chet* (March), however, are much prized, people having a proverb to the effect :

Wase Chetar
Na ghar meve na khetar

or alternatively

Wase Chet
Na khal mitte na khet

i.e., if it rains in March the grain will be so abundant as to fill every granary.

After the crop is sown it requires little or no attention. On irrigated land it receives some weeding, its worst enemy being "Piazi" or wild leek. The local variety is the red-bearded Gujarkhan wheat known as *lohi ratta* or *ratti* : but 8-A is being introduced. Dust and hail-storms are the greatest dangers. 1928 was a particularly bad year throughout the province, and in the district the Attock Tahsíl suffered worst. The disease was so bad that not only was there no grain in the year, but the stalks were such that the cattle would not eat them. A thousand tons of seed grain were imported from outside the district, 8-A so far as possible, but this had to be supplemented by other wheat, some of which came from the Jullundur district, some from Peshawar. The seed was carefully selected through the Agricultural Department, and by the special dispensation of the Financial Commissioner *tuccavi* was distributed not in cash but in kind. Owing to the timely purchases before the market had realized the effect of the rust, it was possible to provide the *zamíndárs* with better seed at a reduced rate. The experiment has proved successful, the weight of the grain being estimated at about 25 per cent. above that of the indigenous variety. The new seed does not, however, give quite so much stalk as the old. The area specially affected by the change of seed is that contained by the triangle, of which the Abbottabad and Grand Trunk Roads form the sides. To the south of the Grand Trunk Road Burhan and the villages adjoining it, also some of the villages in the Chhachh, benefited by this distribution.

Barley.

Barley is a valuable crop on irrigated and manured soils, but its importance in the whole district is small. On the well lands of Attock Tahsíl it is twice as important as wheat. It is usually considered to do after maize much better than wheat, but the

CHAP. II, A. Agriculture. Barley—concld.

best cultivators of the Sil Soan prefer wheat. In the southern parts of the district, as in horse-owning villages, there is a brisk demand for fodder, the crop is a very profitable one, and is mainly cut green for fodder. The cultivator may, for instance, sell one cut at Rs. 2 per *kanál*, cut the crop over once himself for his cattle, and at last, ripening the crop, may get as much as 10 or 12 maunds of grain to the acre. If he sells the standing crop outright he can get Rs. 5 or Rs. 6 per *kanál*, or even more than that. In favourable circumstances the crop can be cut over three or four times.

Barley can be sown much later than wheat, and ripens earlier. In years of heavy winter rain the area under barley always shows a large increase. The crop is usually reaped in April and May, and is garnered generally by the end of June, or early in July. In years of pressure or distress, barley is sometimes cut in March, and the grain, though not absolutely ripe, can then be eaten. Generally speaking, the yield of barley is always larger than that of wheat, though of course the grain is much less valuable. It is always grown alone, and, like the wheat, is of good quality.

Gram.

Gram presents one of the problems of the district. It is the crop which is by far the most suitable in most seasons to the soil of Sarwála, and also, though to a less extent, of that of the Jandál circle of the Pindigheb Tahsíl. But year after year it was found that a crop which germinated well and promised to be most prosperous, nevertheless shortly before the season for ripening came, began to wither and perish. The disease is general in the Sarwála, and unusual in the Jandál circle. The attention of the Agricultural Department was drawn to this calamity in 1924-25. Experiments have been conducted and some knowledge has been acquired, but the remedy has not yet been found. The disease appears to be due to a fungus which spreads most rapidly when cold wind and rain attack the crop after it has begun to flower. The precarious period is thus the end of February and beginning of March. It has also been observed that the cultivation of mixed crops, *e.g.*, wheat with gram, appears to protect the gram to some extent. To the layman it seems as if the grain were liable to catch a kind of pneumonia from bleak weather, and that it requires the shelter and protection of some stronger crop.

OILSEEDS.

Táramíra.

Cultivation of *táramíra* has declined, but it is still an important crop, and in Fatehjang and the Attock Nála ranks after wheat alone. It needs no cultivation, the seed is cheap, and the crop will grow on any land. It is grown almost exclusively on the most inferior kinds of unirrigated land, much of the poorest *rakkar* being able to produce nothing more than a light *táramíra*

CHAP. II, A. — Agriculture. Tárámira—concld.

crop, unless it be a very poor cotton. *Tárámira* is also sown along the edges of paths, over the ridges between fields, is dribbled in among the *bájra*, and is scattered broadcast about the fields whenever rain falls in November. The seed is cheap and the *zamíndár* who cannot afford wheat seed can always afford *tárámira*. If the crop fails there is little loss, and if it succeeds the profit is large. It is a most useful crop. Like gram it is used as a vegetable when green. A good deal is also consumed for fodder. It is the favourite food of camels. But the bulk of the crop is allowed to ripen, and a valuable oil extracted. The only objection to *tárámira* is that it is an exhausting crop, and is considered the most exhausting of all *rabi* crops. In a good year the *tárámira* pays the revenue of the whole year, and great quantities are exported. In Fatehjang itself there are a great many oil presses, and the oil stored in kerosine tins is sent in to Ráwalpindi and Gujar Khan for export. The oil for lighting purposes has now been superseded by kerosine, but it is considered very strengthening and healthy as an article of food, and in many ways takes the place of *ghi* for frying, etc. The outward application in plague and other cases is said to be very beneficial. The Kot estate makes a large income annually from this crop.

A remarkable characteristic of *tárámira* is its vitality. It is often self-sown. In years of good rainfall it springs up everywhere, even on the housetops, in the Kála Chitta Forest, and among the ballast on the railway lines. The real matured area can never be determined, and the recorded area can be considered only a very rough estimate. Taken all in all *tárámira* is probably a more important crop than even gram. It is generally called *zamáh*.

Sarson.

The only other oilseed of importance is *sarson*, or mustard (*Brassica campestris*). It is grown to any extent only in Attock Tahsíl, especially in the Nála, but even there it does not amount to 2 per cent of the total harvested area. When sown alone it is grown for oilseed. More commonly it is sown among the wheat for use as *ság* or vegetables or for fodder. It is sown in the end of September, and when allowed to ripen for oilseed is cut in the second half of April. Lands sown with wheat and *sarson* mixed have a very rich and pleasing appearance to the eye. Two varieties of *sarson*, the white known as *gorí* or *chitti*, and the black, or *kálí*, are in use.

Tobacco.

Tobacco is in some ways the most important of the crops grown on irrigated land. The seeds are sown in the autumn in small beds which have been very carefully prepared and manured for the purpose. When the seedlings begin to come up,

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Agriculture.
Tobacco—*contd.*

they are protected from the cold north winds and frost by palisades made of maize stalks or *sarkanda* grass. About March they are planted out. The land in which tobacco is grown has been ploughed and manured carefully after the reaping of the *kharif* crop. The most common rotation is maize and tobacco in alternate harvests. Very occasionally it is sown after barley, but the arrangement is unsatisfactory and the yield suffers. The outturn of the tobacco depends very largely on the amount of manure the cultivator can afford to put down. For snuff tobacco sheep and goat manure has hitherto been considered essential. For ordinary tobacco the *zamíndár* uses the manure produced by his own cattle, which is stacked in a corner of the compound or on the outskirts of the village and carefully kept. Mr. Butler put the yield of ordinary tobacco at 24 maunds per acre. In the Swábi Tahsil of Pesháwar District Mr. Dane's figure was 25 maunds in 1924. One experiment carried out by the late Mr. Barry gave a yield of just under 70 maunds per acre. The land is quite close to Hazro town, and would be *lipára* if it were not irrigated. So favourably situated was it, in fact, that the tenant who incidentally paid a rent of Rs. 180 per acre, said he grew this particular crop without any manure. Mr. Butler's figure is now accepted as far too low. The yield he assumed is quite inconsistent with the very high cash rents found whenever tobacco is grown. Mr. Steedman assumed a cash rate of Rs. 24 per acre, but his report does not say what the market price of tobacco was then, and it was not much grown. The best wells in the villages round Hazro which get the Gandgarh spill, produce 48 to 56 maunds per acre. On others, further from the *abádi* the yield is 44 to 48 maunds. Going further west near Shamsábád, it is not more than 36 to 40 maunds. This village is almost the extreme limit of the tobacco-growing area. The figure assumed by Mr. Barry for the Chhachh is 44 maunds. It must be remembered that the tobacco is grown mostly on the best *cháhi* land. The rural population round Hazro is very dense, and the majority of the wells are in land which would be *lipára* if it were not irrigated. Mr. Barry was inclined to think also that the crop is rather more heavily manured now than it used to be ; 89 per cent. of the tobacco is in the four groups of villages round about Hazro, which get the benefit of the Gandgarh spill ; 7 per cent. is in villages further to the west, parts of which also occasionally benefit by it.

In the Sarwála circle the tobacco grown in the villages of Musa, Kudlathi, Sheran, etc., whose northern portions are quite close to Hazro, is quite as good as that of the centre of the Chhachh

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Agriculture.

Tobacco—*concld.*

and the yield is quite as high. Further west the land is more sandy and the tobacco not so good, while round Campbellpur the yield is probably still lower. For ordinary tobacco a yield of 30 maunds per acre may be taken. In the Nála circle, the villages of the Saggar tract grow more than a fifth of the tobacco of the whole circle. Manure there is fairly plentiful, though there is not the same intensive cultivation as there is in the Chhachh, and the yield is probably 40 maunds per acre or more. The rest of the *cháhi* tobacco is grown in a number of villages spread over the circle, and usually the manuring is not very heavy, the land being firmer. The assumed yield was 35 maunds per acre. In the case of *ábi*, 30 maunds will suffice as the water-supply is rather uncertain in dry years.

Snuff tobacco.

Snuff tobacco is grown in the best land in the villages close to Hazro : and also in the villages in the north-east corner of the Sarwála circle which border on the Chhachh. This kind of tobacco, as well as the ordinary tobacco, seems to do best in land in which there is a certain amount of *kallar*. The yield varies according to the amount of manure put down : but the ordinary Pathán of the Chhachh can very rarely afford the heavy initial outlay required for purchasing the necessary sheep and goat manure. This is brought in from the Kála Chitta hills and elsewhere on camels, and there is a regular market for it at Hazro. The large majority of the wells on which snuff tobacco is grown are in the hands of Hindu owners or *mukarraridars*, who put down the whole cost of the manure and recover half with interest, at a privileged rate of one rupee per cent. per mensem, from the tenant when the crop is sold. The opinion of those who seem to be reliable puts the yield as varying from 64 to 96 maunds per acre according to the amount of manure used. Mr. Butler's figure was 40 maunds for the very best wells and 32 for others, but these figures are much too low now. Sixty-four maunds to the acre was taken by Mr. Barry as an average.

The amount of snuff tobacco grown in the Nála circle is negligible.

Price of snuff tobacco.

The price of snuff tobacco is subject to considerable fluctuations. In the spring of 1924 it was between Rs. 13 and Rs. 15 per maund at Hazro. Some of the finer grades fetched even more. After the war the price was much higher even than this. The harvest prices for this commodity are not entered in the Circle Note Books so the average of a series of years cannot be worked out. *Zamíndárs* complained that the prices had fallen owing to

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Agriculture.

Price of snuff tobacco—concld.

the large amount grown in the Peshâwar District, which they said was due to the extension of canal irrigation. Mr. Barry worked out the figures as follows :—

GROSS VALUE OF TOBACCO GROWN ON *CHAHI* LAND IN THE CHHACHH AND SARWALA CIRCLES.

Circle.	Ordinary tobacco.			Snuff tobacco.			Total gross value of both kinds of tobacco.
	Area in acres.	Value per acre.	Total value.	Area in acres.	Value per acre.	Total value.	
		Rs. A. P.	Rs.		Rs.	Rs.	Rs.
Chhachh ..	1,867	165 0 0	3,08,055	250	512	1,28,000	4,36,055
Sarwála ..	431	112 8 0	48,487	30	512	15,360	63,747

There are three factors which are important—the climate, which should be such as to give plentiful dew when the leaf is growing to maturity, an admixture of salt-petre in the soil, and manure. Sheep and goats' manure has been rising to prohibitive prices. In 1926 the Deputy Commissioner initiated experiments in artificial manure which are being continued by the Agricultural Department on scientific lines. The results so far are most promising. In 1929 the Zaildar of Haji Shah, Khan Sahib Mian Sher Khan, grew a crop the manure of which cost exactly 1/20th of the cost of ordinary manure, and the results of which were comparable with the best. Unfortunately before it could be harvested and weighed, the locusts destroyed it.

It seems, however, possible that artificial manure will revolutionise prices and the industry.

Fruits and vegetables and "others" (irrigated).

" Fruits and vegetables " in column 11 of statement II and column 8 of statement III includes a very small area under gardens and a much larger area under onions, cauliflowers, cabbages and other green vegetables. " Others " includes melons and water-melons, carrots, turnips and radishes, garlic, pepper and coriander, etc. All these crops are grown almost exclusively on *cháhi* land or on the rich *ábi* lands of Hassan Abdál and Wah and are exceedingly valuable. They are very carefully cultivated and highly manured.

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Fruits and vegetables—*contd.*

Details of the areas according to the 10 years' average for the three circles are given below :—

DETAILS OF DIFFERENT CHAHI CROPS INCLUDED UNDER HEADS "FRUITS AND VEGETABLES" AND "OTHERS" IN STATEMENT III.

	CHHACHH.		SARWALA.		NALA.	
	Rabi.	Zaid Rabi.	Rabi.	Zaid Rabi.	Rabi	Zaid Rabi.
Fruits	4	1	3	..	4	3
Cauliflowers, cabbages and other green vegetables.	59	56	5	28	2	7
Onions	3	76	..	29	1	20
Melons and water-melons.	..	853	..	110	..	112
Carrots, turnips, etc.	12	...	2	..	..	..
Pepper, coriander and other species.	61	2	3	..	46	..
Miscellaneous ..	21	34	3	1	2	1
Total ..	160	1,022	16	168	55	143

The above figures have been taken from the Circle Note Books, but they are not quite accurate as the classification of the different vegetables by different patwaris has not been uniform. Thus in the Sarwála, and possibly also in the other two circles as well, most of the carrots and turnips seem to have been put under " Green vegetables.

No crop experiments have been carried out with any of the above. Their value varies considerably with supply and demand. One year onions may be selling very well and another year high prices may be obtained for carrots and turnips. The price of potatoes in particular is very variable, but they are very little grown. For the wells near Campbellpur the new town and cantonment provide a good market for vegetables. Cauliflowers sell usually at about Rs. 40 to Rs. 45 per *kanál*. Onions, carrots and turnips fetch rather less. Near Hazro the prices obtained for vegetables are possibly a little lower, but the land is much richer and the outturn is higher. In the Nála most of the vegetables and spices are found in the rich *ábi* lands round Hassan Abdál and Wah, whence they are often exported to Ráwalpindi

In these villages onions and cucumbers are often sown just before the sugarcane, in which case room has to be left between the lines for planting the latter, with the result that the yield is not quite so high. Most of the *zamíndárs* consulted have said that vegetables are generally rather more paying than ordinary tobacco, provided the *zamíndár* does his own marketing, but less so than snuff tobacco. The price of melons varies greatly in different seasons, but in the long run they probably fetch rather less than vegetables. To be on the safe side, the gross value of the crops including "Others" grown on *cháhi* and *ábi* land may be put at Rs. 20 per *kanál* in the Nála and Rs. 22-8-0 per *kanál* in the other two circles.

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Fruits and vegetables—concld.

The opening up of the Chhachh *iláqa* by the Hazro-Gondal Road, the Shadi Khan Grand Trunk Road, the Garbett Road to Shamsábad, and the Hazro-Ghurghushti-Jalália Road has made accessible to the vegetable growers a market which previously they could not reach. In the summer of 1928 a Dogra Company, stationed in the height of the hot weather in the Fort at Attock, applied for an extension of its term because of the excellence and the cheapness of the fruit and vegetable supply. Lorry transport from the heart of the Chhachh supplied them and other markets with vegetables at a rate much below that current in Jhelum. Cheap as the rate was to the consumer, the grower was profiting exceedingly, as the lorry-owning middleman could pay him several hundred per cent. more than he could get before in his local area, and still have a handsome profit for himself.

Other kharif crops.

Other kharif crops include *til*, hemp, pepper and other small crops.

YIELDS.

The yields assumed at Settlement are to be found in the statements attached to the assessment reports: and vary for each tahsil. But the most important figures for yields are those contained in the Director of Land Records' circular which is subject to periodic revision. It is on this, and not on the Settlement Officer's figure, that decrees in rent suits are normally based. Settlement figures have therefore not been reproduced.

EXTENSION OF CULTIVATION.

General.

There was a feverish extension of cultivation between the first and 2nd regualr Settlements when the expansion in Fatehjang Tahsil was 66 per cent. and in Pindigheb 63 per cent. The third Settlement showed an increase of 29 per cent. over the

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second, the fourth of 3 per cent. over the third, spread over the district as follows :—

Tahsil.	Area.		Number of wells.
	Cultivated per cent.	Irrigated per cent.	
Attock	−5	+6	798
Fatehjang	−4	+3	250
Pindigheb	+6	+7	262
Tallagang	+10	+9	337
Total ..	3	6	1,647

In the Attock Tahsíl, the decrease is due to the effect of gram failures, to the loss of some land along the Haro river by erosion and to the general tendency of the tenants to give up the less productive land. In the Fatehjang Tahsíl the decrease is due to diluvion, and to the fact that in some villages people left off cultivation of inferior lands for 2 or 3 years before the commencement of measurements. The increase in population seems to be the main cause for the increase in the Pindigheb and the Tallagang Tahsíls. The increase in the number of wells and in the *cháhi* areas is substantial everywhere.

It is necessary to note that the classification of *cháhi* lands during the fourth settlement was changed. At the third Settlement all land that was ever irrigated by a well was recorded as *cháhi*. In the fourth settlement land was entered *cháhi* only if it had been actually irrigated in at least two harvests, out of the four years preceding the actual measurements, and provided also that it had permanent means of irrigation still existing and was not included in the class of *cháhi-nahri*.

Reduction of waste.

With regard to the method in which land apparently almost unculturable is brought under cultivation, Major Wace, who settled Tallagang Tahsíl, then a part of Jhelum District, made the following remarks :—

" The method by which cultivation is now extending in the west half of Tahsíl Jhelum, in Tahsíls Chakwál and Tallagang, and in the hill circle of Tahsíl Pind Dádan Khán, and in which it has been extending during the past fifteen years, is peculiar to this part of the Punjab. These portions of the district are elevated plateaux intersected by ravines. The ravines cut back in countless little

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branches into the plateaux and the lands reclaimed are largely those which form the beds and sides of these little ravines, or the sloping lands which lie at the foot of the low ranges of hills. These lands are correctly described as unculturable in their natural state. They are rendered culturable by a laborious process of levelling down and banking up. They were originally for the most part recorded as village common : but since the Regular Settlement was made there have been continual partitions of them all over the country. And when partitioned, the owners reclaim them, not by an expenditure of capital, but by steady industry. The upper banks are broken down, the lower ends of the slopes are banked up and the beds are dammed. Every means is adopted to level unequalities and to prevent the rains from washing away the soil that is broken down. Occasionally down comes heavy rain and breaks the lower slopes and dams on which so much pains have been spent and washes away a great quantity of valuable soil : and the cultivators have to do almost half their work of reclaiming and levelling over again. And so they have worked on perseveringly and unweariedly for the last fifteen years ; till when the new measurements come, and we add up the total area cultivated, we are astonished at the gross amount of land that has been reclaimed and wonder how the previous Settlement Officer can have so short estimated the prospects of extended cultivation. Well, so far so good ; only let us take care how we assess this new cultivation. A great portion of it is in a very unformed state ; and if we put too much revenue on it, the people will lose heart and throw it up. Treat it lightly, and they will not feel its assessment ; and will go on as before steadily reclaiming unculturable land, till very likely, thirty years hence, the Settlement Officer of the day will wonder how it came about that I repeated my predecessor's short estimate, and returned so much land as unculturable. In other districts the land returned as culturable is land which any one would be glad to have ; but that reclaimed in this district is stuff which no ordinary outsider would think worth asking for : but the resident cultivators break it down, level it, and embank it year by year, till in course of time the new lands are as fine as, and sometimes finer than, the old."

LOANS AND ADVANCES.

Land Improvement Loans.

The extent to which loans are given depends almost entirely on the degree and manner of attention paid by the Deputy Commissioner. Where the Act is worked with care and sympathy, the facilities it affords are gladly and fully utilized. But if left to themselves, Tahsildars dislike the extra work each loan involves, and a little harshness or lack of sympathy in recovery will

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quickly discourage applications. Generally loans for wells should be given freely but also fully. A not uncommon mistake has been to advance only a portion of the genuine requirements of the *zamindár* and then dun him because he has been unable to complete the improvement for which he borrowed. Applications for loans for embankments require caution. It is in such cases that the dishonest *zamíndár* can most easily deceive. Money really required for weddings or funerals or for extravagance is borrowed for an "embankment," and when inspection takes place the Inspecting Officer is assured that construction was completed. but the rains washed the work away. To strike a happy medium between the encouragement of genuine development and the refusal of improper demands calls for constant vigilance.

Agriculturists' Loans Act.

Loans under the Agriculturists' Loans Act are made mostly in petty grants ostensibly for the purchase of bullocks or seed. The famine conditions of 1920-21 necessitated very generous distributions, a total of some three lakhs in all being disbursed in the district. Similarly the rust and blight of the wheat crop in 1928 was followed by liberal grants of *taccavi* including distribution of seed. Again the reclamation of the Chel left the *zamíndárs* with land particularly hard, the ploughing of which by means of the ordinary plough and ordinary bullock was impossible. *Taccavi* was distributed for the purchase of strong cattle and iron ploughs, thanks to which the ground was rapidly broken up.

Agricultural banks, &c.

The co-operative movement was originally introduced into the district in the year 1908 when the first society was started at Shamsábád followed by three more in the Fatehjang Tahsíl. It appeared at that time that the start of any more societies was not possible, and the district was perhaps in fact not fit for undertaking co-operative work, since no more societies could be established till 1913. In 1914, 10 more societies were started round Shamsábád, and one society made its appearance at Khunda in Pindigheb Tahsíl. Since then the movement has steadily gained ground and every year the number of societies has increased. In 1929 the total number of societies in each tahsíl was as below :—

Attock	155	
Fatehjang	115	including 49 societies of Kot Estate.
Pindigheb	92	
Tallagang	108	
Total ..	470	

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The total working capital of all kinds of societies in the district exceeded 15 akhs at present.

The headquarters of the Assistant Registrar, Co-operative Societies, is at Campbellpur. Sardar Muhammad Nawaz Khan is Honorary Assistant Registrar of Societies in his estate, 4 Inspectors are working in the district, one for each tahsíl, two of them having been added in 1928-29.

The operations of societies are not restricted to co-operative credit only, there are in addition to the primary credit societies, one Central Bank two Banking Unions, Thrift and Saving Societies, Adult Schools, Arbitration Societies, Sheep Breeding Society, Better Farming Society and Cattle Breeding societies. The last type of societies include bye-laws for the protection of cows also, and were the creation of Mr. Garbett when Deputy Commissioner of the district. The pioneer and the biggest society of this class at Lawa is associated with his name and is known as the Garbett Lawa Cattle Breeding and Cow Protection Co-operative Society, Limited. It has 155 persons as its members and on its Registers 548 cows and 53 calves. All the other societies are on the model of this society but are not so big. In these societies Hindus and *zamíndárs* unite. The *zamíndár* guarantees not to use in the plough cows which are registered : the Hindus not to execute decrees against such cows. Where the societ is big enough a special bull is obtained for the service of the cows. The effect of these societies on the standard of the cattle became apparent in two years : but they will continue to flourish only if the district authorities maintain interest.

All the Cattle Breeding societies undertake the breeding of Dhanni Cattle, approved Dhanni bulls are being used and poor local bulls are being castrated. Altogether there are 1,045 cows (of which 899 are of Dhanni breed) and 203 calves registered. Four societies in Tallagang Tahsíl have been helped by the grant of the lease of District Board and Government rakhs, which are used by the cattle belonging to the members of the society as pasture, while non-members are allowed to send their cattle into the rakhs on payment of grazing fee. The initial progress of the societies has been satisfactory.

Cattle belonging to the members of the societies have made themselves conspicuous by winning majority of prizes at the various local cattle fairs.

Bulls in 11 of the societies are getting subsidies from the District Board.

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The Co-operative Better Farming society is at Basia and is doing useful work in teaching its members the use of improved seed and implements.

The only Sheep Breeding society at Thatti Gujrán is as yet in the experimental stage.

The arbitration societies, 12 in number, are all in the Kot Estate, and have done very useful work.

The Thrift and Savings societies are mostly of teachers, and they are helping the members in steadily accumulating their savings.

Out of the two Banking Unions one is at Shadi Khan with Captain Ajab Khan as its President, and is running solely on local deposits. The other is at Kot Fateh Khan and is running on the funds of the Kot Estate and issues loans without interest to its members.

The co-operative societies have at present touched only a small proportion of the population of the district, and there is still a vast field for its expansion to achieve the desired results.

Agricultural indebtedness.

The 1907 Gazetteer summed up the financial position of the *zamindár* as follows :—

"Generally the district is not seriously embarrassed. Things are worst in Pindigheb Tahsil. Then come the Attock Nála and parts of Tallagang. Elsewhere the agricultural population easily holds its own. Indebtedness does not depend much upon the pitch of the revenue or, except in the Jandál and Makhad *iláqas*, on natural advantages, but almost entirely on the varying degrees in which thrift is practised or neglected. Debt often begins in extravagance on domestic occasions or in ruinous litigation. Perhaps the cattle die through drought or sickness. In days of prosperity no provision has been made to provide a reserve for bad seasons, and there is only the money-lender to whom to go. Once in his clutches escape is difficult. Even a trifling debt, fostered by his wiles and swollen by means of heavy compound interest before long becomes a crushing burden. Most of the mortgages appear to take place in the four months of July, August, December and January, when the revenue is being realised, but that does not prove that indebtedness is due to the severity of the assessment. The fact of having to find a given sum by a certain date does lead to many transfers, but the man who mortgages his land to pay Rs. 30 would probably not refrain from doing so if he had to

Agricultural indebtedness —*contd.*

pay Rs. 20 or less. There are other reasons also for the large number of transfers registered in the demand months; balances are struck at those seasons, and the zamíndár has more leisure to attend at the tahsíl than at other times."

During the course of his settlement Mr. Barry made careful enquiries in each tahsil as to the extent of indebtedness. In the Attock Tahsíl he felt that the answers returned to his enquiries were so untrustworthy that he was unable to arrive at any conclusion. For the rest of the district he wrote in the Fatehjang Assessment Report as follows:—

"Careful enquiries have been carried out into the amount of floating debt owed by the proprietary body in the different circles. The results are given below. For the reasons given in paragraph 48 of the Pindigheb Assessment Report, however, the figures are probably not very accurate:—

Assessment circle.	Unsecured debt.	Debt per cultivated acre.	Debt per rupee of the land. revenue.
	Rs.	Rs.	Rs.
Nála	1,75,872	5.2	7.8
Gheb	3,60,755	2.8	6.4
Soan	5,18,689	6	4.7
Total tahsil ..	10,55,316	4.25	5.6

It will be seen that the estimated unsecured debt for the tahsil is Rs. 4-4-0 per acre of cultivation as against Rs. 3-8-0 in Tallagang and Rs. 2-14-0 in Pindigheb. When we compare the debt with the land revenue demand, however, we find that it is only 5½ times the assessment here against 7½ times in Tallagang and 7 times in Pindigheb.* I think, therefore, we are justified

*Mr. Darling in his book, "The Punjab Peasant in Prosperity and Debt" (pages 7, 10 and 88) estimated the total debt of owners and occupancy tenants in the Punjab at 15½ times the land revenue and in the Attock District 18 times. Assuming, as he does, that about half the total debt is mortgage debt and the other half unsecured, the latter would be about 8 times the land revenue in the whole Punjab and 9 times in Attock. In Rawalpindi and Jhelum the figures are rather lower.

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in concluding that the indebtedness in Fatehjang is relatively less than in the other two tahsils. As regards the different circles, the rather high debt in the Nála is due entirely to the dissipation and extravagance of the Khattar owners. Much of the debt in the Sil is attributable to the same cause. In the Soan, as we have seen, there is very much less extravagance ; and a good deal of the floating debt is due to the necessity of borrowing in bad years to make good losses in cattle, etc. Without co-operation, which is still backward in this tahsíl, it is always very difficult for small peasant proprietors to keep out of debt owing to the usurious rates of interest charged by the village money-lender. Expressed in terms of the land revenue, however, it will be noted that the floating debt of this circle is less than that of either of the other two and also a good deal less than that of the Pindigheb and Tallagang Tahsíls."

It is always to be remembered that a limited degree of debt indicates prosperity. The relations of a peasant to his land are to be compared with the position of a shareholder in a company. The company raises capital to develop, it may be a property, it may be an idea. By means of the money the idea, or the property, are able to produce an income which would otherwise be denied to them, and provided that income is so distributed as to give an adequate return both to the owner of the property or idea and also to the owner of the money, the transaction is profitable, and by reason of the credit the income of both parties is enhanced. An Agricultural Society that had no debt might well be in a state of stagnation. It is only when the debt is taken not for development but for sheer existence, or when the income derived from the property is swallowed up in payment of the money lent, that debt really becomes a burden.

In the Attock Tahsíl in particular this is thoroughly recognized. There is a considerable amount of floating debt. A Pathán readily by mortgaging his property raises money either for a transaction connected with the land, *e.g.*, the sinking of a well, or for a transaction in which he sees an opportunity of immediate profit, *e.g.*, a cattle transaction ; and when this is complete, he redeems the mortgage. The mutation work in this tahsil is extremely heavy : because land is thus looked on as a liquid asset.

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Prices realised for land.

It is interesting to note the figures recorded in 1907, which were as follows :—

Year.	Per acre. Sale.	Per acre. Mortgage.
	Rs.	Rs.
1900-01	31	25
1901-02	33	21
1902-03	16	20
1903-04	22	21
1904-05	32	18
1905-06	47	24

In Tallagang sale prices rose in the twenty years 1878-98 from Rs. 9 to Rs. 26 and mortgage prices from Rs. 10 to Rs. 20 per acre. Land in the Chhachh that in 1885 was sold for Rs. 23 or mortgaged for Rs. 32 an acre was in 1907 sold for Rs. 175 and mortgaged for Rs. 97. In the Sarwála the average mortgage and sale money per acre stood in 1907 at 72 and 127 times the land revenue. The average sale money per acre cultivated came to Rs. 63. The sale price in 1885 was Rs. 30 per acre.

The passing of the Land Alienation Act for some time depressed the selling value of land, but prices by 1907 regained their former levels.

Since 1907 the rise has been very much greater :—

Tahsil.	Sale-price per acre.		Rise per cent. since last Settlement.	Mortgage price per acre.		Rise per cent. since last Settlement.
	Last Settlement.	Now.		Last Settlement.	Now.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Attock	91	409	349	55	183	233
Fatehjang ..	75	163	117	38	101	166
Pindigheb ..	44	165	275	19	64	237
Tallagang ..	33	169	412	20	82	310

These prices seem inflated compared with the return on money invested otherwise, but there are three factors which tend to

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Agriculture.

increase the value of land. To the investor it is secure, whereas business is insecure. The ownership of land carries with it a certain dignity conferred in no other way. The Land Alienation Act has tended to enhance not to depreciate its value.

Rates of interest.

A strong *zamindar* can borrow at 18 per cent. The more normal rate is 24 per cent. to 25 per cent. An occupancy tenant has to pay as much as 37½ per cent.

To ordinary shop-keepers of good credit the usual rate is 1 per cent. per mensem occasionally a little less. The following accounts of the methods of money-lenders is taken from the Shahpur Gazetteer, but is accurate for at least the southern half of this district.

The better class of Hindu and Sikh bankers and shop-keepers keep three account books (*vahí*), (1) the day-book (*súhr, parchún* or *bandi*), in which all transactions are recorded day by day as they occur; (2) the cash-book (*rokar*), in which only cash transactions are entered as they occur; and (3) the ledger (*kháta vahí* or simply *vahí*), in which each client's account (*lekha*) is written up from the day-book at the shop-keeper's leisure. The great majority of shop-keepers, however, keep up only the ledger, making entries in it from memory or from rough notes which are destroyed, so that there is no means of checking the entries. The ledger (*vahí*) is kept in the form of loose leaves fastened together lengthwise in such a way that a leaf can easily be extracted without detection. Each page (*panna*) has its number (*angg*), and it is usual, on opening a new ledger, to get a Brahman to imprint on the seventh page a coloured picture of Ganesh and his rat, adding the invocation "*Om Svasti Ganesháyanama*" with the date and a blessing. The account of each client shows on the left side the debits or out-goings, and on the right side the credits (*ágit*). Generally, once a year the balance (*báki*) is struck, interest (*veáj*) charged, and the net balance carried forward to a new account. As the peasant who has his dealings with the shop-keeper (*kirár*) is often utterly ignorant of accounts and very careless, he is often taken advantage of by the shop-keeper who will, as occasion offers,

(1) dole out old grain of sorts for food purposes in the cold season, and take repayment at harvest time, a few months later, in wheat or its money equivalent, plus from 25 to 50 per cent. interest;

(2) exact full repayment on the threshing-floor, leaving the customer insufficient grain wherefrom to pay his land revenue and feed himself till next harvest;

(3) a month or so later pay his debtor's land revenue, and, taking advantage of his necessity, charge him at least the highest average rate for money lent; CHAP. II, A. — Agriculture.

(4) take one anna per rupee as discount (*katt* or *gadd chhora*) when making a loan, but charge interest on the discount; Rates of interest—concld.

(5) cut six months' interest out of a loan, and record the gross sum as a loan free of interest for six months;

(6) cause the debtor to go before the Sub-Registrar and state that he had received the whole loan in cash, whereas, in fact, the amount was chiefly made up of simple and compound interest;

(7) misrepresent debts in the ledger by entering inferior grains as if wheat;

(8) allow no interest on repayments in kind and either no or short interest on credits in cash, and cause the customer to believe, when he is making a payment to account, that a concession of grace has been made when a small remission is credited to him out of the interest due (*chhot* or *mor*);

(9) generally keep accounts in a loose, unintelligible, way which make the separation of interest from principal impossible;

(10) keep only a ledger, plus sometimes a sort of day-book, in loose sheets or book form, and write up the former at any time;

(11) strike the balance in a casual way, naming as present one or two witnesses, either brother lenders or men of the class known as "four-anna witnesses;"

(12) charge a full year's interest on grain or money lent a few months or even weeks before the striking of balance.

The usual rate of interest charged between bankers of good credit on bills of exchange (*hundi*) is one pice per day for Rs. 100=7½ annas per cent. per mensem, nearly 6 per cent. per annum. On ordinary loans to shop-keepers of good credit the usual rate is one per cent. per mensem = 12 per cent. per annum. But a peasant rarely gets a loan at less than one pice per rupee per mensem, or Rs. 18¾ per cent. per annum; and often the rate charged is 24 % or 36 % per annum; and with the aid of the methods of calculation detailed above, the money-lender often so manages his accounts that a good solvent customer's money debt is doubled inside three years, and his grain debt inside two years; and if the lender be exceptionally dishonest, and the debtor exceptionally helpless and stupid, the debt doubles itself in an even shorter period.

LIVE-STOCK.

CHAP. II, A. Agriculture. Plough-cattle.

The Tallagang Tahsíl and the adjoining Chakwál Tahsíl of the Jhelum District constitute the heart of the Dhanni tract, the animals of which are noted throughout the Punjab for their speed, strength and intelligence.

The average height is 51 inches behind the hump with a chest measurement of 77 inches. The size of the animals is moderate, foreheads flat, horns short, body square, backs level, chests deep, tails very long with a tuft of hair at the end of them and sheaths close to the body. The cows in the past gave a small quantity of milk but that very rich in fat.

The development of the breed owes a great deal to Mr. (now Sir) Montagu Butler, who when Deputy Commissioner initiated the Dhanni Cattle Scheme. The objects of the scheme were to standardise the breed and to increase the number of pure-bred animals. Government makes year by year a grant proportioned to a grant given by the District Board. The shares are usually half and half. By means of this fund a certain number of bulls are purchased by the District Board whose services are given free to the people of the tract. In 1929 there were 18 such bulls. In addition subsidies, locally known as "*wazifas*" or scholarships, are given to approved animals maintained by the *zamindars*. These measures resulted in a very considerable progress. And throughout the Tallagang Tahsíl and spreading more and more into Pindigheb and Fatehjang, the class of cattle is improving and the interest taken therein by the *zamíndárs* increasing. An extension of the original scope of the scheme was initiated in 1926 by the opening of Cow Protection Societies, and the encouragement of the people to preserve their fodder. The difficulty in this tahsil has been that in a good year fodder is wasted: in a bad year it is so difficult to come by that animals are sold for a mere fraction of their normal value. In 1922, Mr. Miles Irving, the Deputy Commissioner of the time, wrote as follows:—

> "I have now just returned from a tour in the western part of the Tallagang Tahsíl and find conditions there worse than I had anticipated. Plough cattle seem to have disappeared altogether. I have seen the fields being ploughed with donkeys and calves and with camels, but hardly ever with a pair of oxen, and, wherever I go, I have seen large tracts of land perfectly fit for ploughing which the people have not been able to touch."

It appeared therefore that to supplement Mr. Butler's scheme it was necessary to provide for the preservation to the *zamíndár* of his cattle in lean years.

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Further, the best young stock are the product not merely of good bulls but also of good cows, and the *zamíndár* had no incentive to look after his cows. They were always being attached by the money-lender in execution of decrees. An attempt was made to insist on the fact, obvious to the farmer, but seldom admitted by the average Sub-Judge, that a cow is an agricultural animal which is a necessity to a farmer. In addition Cow Protection Societies were instituted with a view to improving the lot of the cow by securing a guarantee from the money-lender that he would not cause a cow to be attached in payment of a debt provided the *zamíndár* would guarantee not to use, as the custom of the country was, a cow in the plough. The selected cows are now also admitted to subsidies. Milk records are taken by Cow Societies, and a very considerable development in the value of the cows and of the young stock has already become apparent.

A favourite village sport is the "*Karáh*" competition. The *Karáh* is a kind of basket strongly built, which is used for shovelling earth in soft soil generally for the purpose of making embankments. Bullocks are pitted against one another, both in public and in private competitions, and the better animals are particularly well looked after and often kept from the plough for competition and show.

The cattle of the rest of the district are of a very poor breed. The cows are very poor milk givers, and cows for milk are freely imported from other districts. Cows drop from four to seven calves before going barren.

Cattle diseases.

Cattle diseases are at times very prevalent in this district, and are often very fatal. Eleven different diseases are reported to be known. The most fatal are—

Gari or *ghotu*, a swelling of the glands ; animals thus affected rarely survive. The only attempt made to cure it is by pronouncing spells over the animal. It is infectious.

Tak or *taku*, which comes at all seasons ; the animal ceases to eat, the body swells, and the skin becomes limp, and the temperature falls.

Bari zahmat, or *wah*, a kind of dysentery. *Wah* also is now used for rinderpest.

Mokhur, the foot and mouth disease. Animals affected are carefully separated from the others.

Pharún, accompanied by cough.

Dhakh, a disease of the mouth.

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Agriculture.

Cattle diseases—*concld.*

Ching, pilchi, tah and *tili*, the last a disease of the spleen, are vernacular names for less common affections. When kine are affected with *mokhur*, it is considered very beneficial to hunt down a jackal with dogs, and then to drag his dead body round the affected animals.

Price of cattle.

The price of a cow runs up to Rs. 80 : of an ordinary bullock to Rs. 100 : and of a good buffalo in milk up to Rs. 150. But the special Dhanni Bulls and Bullocks are hard to come by : and prices range from Rs. 300 to Rs. 500 for a prize winner. Average sheep fetch Rs. 6 : *dúmbas* from Rs. 6 to Rs 20. Goats average Rs. 10.

Census of plough cattle.

Statement No. 22, Volume II, gives the number of plough cattle enumerated by patwaris. For the Chhachh and such other portions of the district as are secure the figures may be accepted as indicating an approximately correct average. For the Tallagang and the more insecure tracts the figures are true only for the particular year. Mr. Irving's account of the dearth of cattle in 1920-21 has already been given. That was a year of extreme scarcity, but the immediate conditions of the season always influence the number of cattle very greatly. Indeed even in the Chhachh where grazing is non-existent and fodder has normally to be provided, it is common enough for cattle to be bought for the ploughing and threshing seasons, and sold immediately the agricultural operation, for which they were required, has ceased.

Camels

Except in the Chhachh camels are found, but in ever decreasing numbers, in all tahsíls and in all circles. They are common in many parts of Tallagang, and many of the big Maliks of Pindigheb and Fatehjang own large numbers, from which they derive considerable profit. They are all pack animals, highly bred riding camels being quite unknown. But they are a fine breed, and the keeping of them is encouraged by the proximity of two cantonments. A considerable number are employed on the grain routes, especially to Gujar Khán and the stations on the Mari-Attock Railway.

Camels are made to carry light loads when two years old, and are considered full grown at seven years. While still at the mother's foot, the young camel is known as *toda* or *lihák*. From this period up to two years as *chhattar* ; when three years old as *tirhán* ; four years *dok* ; five years as *chocka* ; six years as *chhigga* ; seven years and upwards as *jawán*. They usually work until twelve years old. They browse on trees and shrubs, such as *jand* and *phulaa*, and occasionally get *tárámira* and green *móth*, of both of which they are very fond. The absence of carts, except on the metalled roads, makes camels peculiarly valuable in this district.

Prices which in 1907 were quoted as varying from Rs. 30 to Rs. 120 now run from Rs. 100 to Rs. 400.

The diseases from which camels suffer much in this district are—

Máwára malli, from cold or wind stroke.

Akar, under which the animal becomes almost rigid.

Joga, a very fatal disease, considered very infectious, in which the whole body swells, and the animal cannot eat.

Pira, accompanied by eruption on the skin.

Horses.

In 1907 the district had a certain reputation for horse-breeding. Several parts are well suited for the purpose. In Colonel Cracroft's time the horses of Jandál were noted for their blood and wiry strength. The chief horse-breeding tracts were the Sil *iláqa* of Pindigheb, the Gheb *iláqa* of Fatehjang, the Khattar tract north of the Kála Chitta and parts of Tallagang. In the Narrara hills a breed of small hardy pony was found.

In 1930, with the exception of the excellent stable maintained by the Sardar of Kot Fateh Khan, horse-breeding has ceased to exist. Malak Jahan Khán of Khunda's reputation lives, but his stable has disappeared. In Láwa a few good horses are still to be found, and when high authority visits the district, there is a good turn-out of horses and men for tent-pegging at Tallagang. But the stock are usually imported from the canal lands in Shahpur. The following table shows the number and location of breeding stallions in the district :—

Tahsil.	Name of stud.	Detail of horse stallion.				Detail of District Board horse stallion.	
		Arab.	Kathiawar.	Thorough bred English.	Total.	Arab.	Total.
Attock	Campbellpur	1	..	..	1	..	1
	Hazro	1	..	..	1	1	1
Fatehjang	Fatehjang	1	..	..	1	1	1
	Kot Fateh Khan	2	..	..	2	..	..
Pindigheb	Khunda	2	..	..	2	1	1
	Pindigheb	1	..	1	2	1	1
Tallagang	Tallagang	..	1	..	1	1	1
	Taman	1	..	..	1	..	..
		9	1	1	11	5	6

CHAP. II, A.

Agriculture.

Mule-breeding.

Mule-breeding originally took a strong hold on the district, but in recent years *zamíndárs* have begun to complain that the prices paid for young stock are not commensurate with the cost of upkeep of the mares.

Mules when two years old are known as *deorhi*; when three years old as *dowak*; and from five years old as *jawán*, being then full grown. They are, however, worked after their third year to their eighteenth. Their prices vary very much from Rs. 50 to Rs. 500 for the female, which is considered much superior to the male, and from Rs. 20 to Rs. 200 for the male.

Donkeys.

Donkeys are numerous in the district, and are employed in all kinds of carriage, especially that of stone. They are often used to fetch water when the well or other water-supply is at a distance. Every *Kumhár* and *Dhobi* has one or two. The majority are miserable little animals bought and sold for about Rs. 5, but the best will carry an enormous load of grass almost hiding them from view, and cost as much as Rs. 100. The Tallagang donkeys are particularly good.

Sheep and goats.

Considerable flocks of sheep and goats are kept throughout the district. These wide arid plains provide excellent browsing for these animals which are always increasing, and are a very material addition to the means of support of the tenant class, and to a less extent of the owners themselves. In the villages bordering on the Kála Chitta and Khairi Murat ranges and in Tallagang the number of browsers is very large.

Sheep are of two breeds, the ordinary, and the *dumba* or fat-tailed species. The *dumbas* of Makhad are the best breed of sheep in the district. Neither species is of very good quality. Sheep are kept for wool and for their produce. They are shorn twice a year, in or about October and March. The yield of wool on the average is probably not much more than one seer per sheep per annum. Blankets are made from the fleeces. The milk of the ewes is drunk, and mutton is sometimes eaten.

Goats are of good quality, and are very profitable. Their hair is cut only once a year in *Baisakh*, the yield being about half a *sér*. *Chhats*, *borís*, or large packing bags, much used in the district, and ropes are made of goat's hair. The female goats continue to give milk after their young have been taken from them. The milk is good, and is largely consumed. Goats breed more rapidly than sheep, and often drop more than one kid at a time. They give on an average one kid in the year, and continue producing for five or six years.

A disease known as *phrikki* or *tainki* is often very fatal to both sheep and goats; the *zamíndárs* know no remedy for it, and it comes on and proves fatal in a very short space of time, the animal often succumbing as if shot. **CHAP. II, A. Agriculture.** Sheep and goats—*concld.*

Paun or *khárish* is a sort of mange.

Zahmat or *wah* is a kind of dysentery.

Thandi is a disease of the mouth accompanied with cough.

Phrikki or *thandi* is considered very infectious.

The real problem in the maintenance of both sheep and goats is the annual closure of the Kála Chitta forests for 3 to 4 months in the year. The *zamíndár* tends to maintain a flock as large as the maximum grazing, at the best time of the year, can feed. The result is that when the forest is closed and he cannot afford to pay for other grazing, he is prepared to go to great lengths in the way of securing illicit grazing. The problem is one which has never been satisfactorily settled.

Cattle fairs.

The first cattle fair was started in Tallagang in 1907. This has increased and now lasts for a week and is very well attended. In addition fairs are held—

At Hassan Abdál on Saturdays,

At Hatti on Sundays,

At Gondal on Mondays.

These latter fairs represent the onward march of beef on the hoof from the Punjab Plains to the markets of Pesháwar. They are attended chiefly by Patháns.

IRRIGATION.

Canal irrigation.

There are no Imperial canals in the district. The land shown as *nahri* and *ábi* in the Panjkatha area of the Attock Tahsíl has already been described.

Well irrigation.

The methods of irrigation from wells have been described at pages 153 to 157.

Well irrigation has increased considerably in the last two decades, but there is still room for further expansion.

Section B.—Rents, Wages and Prices.

RENTS.

CHAP. II, B.

Rents, Wages and Prices.

Of the whole cultivated area of the district, 39 per cent. is cultivated by owners. In the third Settlement the proportion tilled by them was about 38 per cent. Tenants with rights of occupancy hold about 18 per cent. of the cultivated land and some 44 per cent. is tilled by tenants-at-will at various rates.

Kind rents.

The detail of kind rents paid (fourth Settlement) by tenants-at-will is summarized below in percentages of the total area occupied by such tenants :—

Tahsil.	$\frac{1}{2}$ or more.	2/5 and less than $\frac{1}{2}$.	$\frac{1}{3}$ and less than 2/5.	Less than $\frac{1}{3}$.	Total area under kind rents.	REMARKS.
Attock	32	27	32	8	100	
Pindigheb ..	18	31	42	8	100	
Tallagang ..	7	6	74	13	100	
Fatehjang ..	91	7	1	..	100	
District ..	39	18	36	7	100	

The most common form of rent is a share of produce.

Cash rents.

Cash rents are mostly found in the Chhachh tract of the Attock Tahsíl where occupancy tenants pay cash rents on 26 per cent. of the cultivated area. They were generally fixed in the first Regular Settlement and are sometimes very complicated. The amendment of the Punjab Tenancy Act in 1925, which allowed the adjustment of cash rents, has saved a large number of owners from unnecessary litigation for enhancement by a regular suit.

Rates of rents.

It is a curious feature of the tahsíl that generally speaking occupancy tenants and tenants-at-will pay the same rate of cash and kind rents. If the better well lands are let to tenants-at-will in the Chhachh, a kind rent is usually taken. The typical rate is half, both on irrigated and unirrigated land : but there are considerable areas along the Indus in the hills round Ghurghushti, Malakmala, in the outlying portions of Shamsábád and in the corner near Attock where $\frac{2}{5}$, $\frac{1}{3}$ and even $\frac{1}{4}$ are taken. Moreover, in the Chhachh, though not elsewhere in the Attock Tahsíl, the proprietor usually takes the same share of straw as of grain. In the Sarwála circle the customary rent is $\frac{1}{3}$ together with one bullock-load of straw, except in the case of fodder crops which are divided according to the proportion of the grain. There are other considerable areas where the customary rate is not followed and on which rents vary from less than $\frac{1}{3}$ to $\frac{1}{2}$. On

cháhi, *ábi* and *sailáb* lands the customary share is ½, but in the sandy tracts away from the village site and beyond reach of even drinking water the landlord is glad enough to take ¼ or even ⅕ of the grain. Round the village site, and especially in the firmer soils along the Haro, ⅖ is sometimes taken especially in Khattar villages, and in two large estates, Bariar and Shakardara, the rate is slightly higher than in the surrounding villages. In Tallagang the prevailing rate is ⅓, with the exception of the area round Naka-Rihan, a village lying about 6 miles north-east of Tallagang, where a good lightish *maira* soil is let out on *chakóta* rent of an average of Re. 1-10-9 per acre, and in certain other areas, *e.g.*, *Tamman* and the *hail* lands throughout, on which the owners take ⅖. Occasionally, when tenants with good cattle are hard to come by, an arrangement known as the *adha lia* is made. The landlord provides one bullock and the seed : the tenant the other bullock and the labour. All other expenses of cultivation are shared half and half, as is also the produce. After deduction of menials' dues and other expenses, the owners' share of net produce, worked out on the basis of rents for the different tracts, is as follows :—

CHAP. II, B.
Rents, Wages and Prices.
Rates of rents—concld.

Tahsil.	Circle.	Irrigated.	Unirrigated.
Attock	Chhachh	44	47
	Sarwála	37	30
	Nála .. .	45	41
Fatehjang ..	Nála	45	45
	Gheb	43½	44
	Soan	44½	47½
Pindigheb ..	Jandál .. .	38	34½
	Makhad	27	26
	Sil	36½	37½
Tallagang ..	Tallagang	29	31.6

Mukarraridari rents.

Exactly what a *mukarraridari* tenure is will be found explained at pages 256 and 257 in the chapter devoted to the tenures. We are here concerned only with the payments received by the landlord.

CHAP. II, B. — Rents, Wages and Prices.

Mukarrari-dari rents—*concld.*

These consist of an initial cash payment, or *pagri*, which varies greatly but can be roughly averaged at Rs. 100 *plus* an annual payment in perpetuity. In normal cases occurring in the last 15 years, this rent has been from Rs. 16 to Rs. 20 an acre. Along the Grand Trunk Road the usual rate is Rs. 18 though if the owner is weak, Rs. 16 is given. In a case in Akhori recorded in 1927 Rs. 32 per acre was paid. The supply of *mukarraridari* seems inexhaustible : and the size of the *pagris* demanded by owners is steadily increasing.

WAGES.

Skilled and unskilled.

In 1907 skilled labour earned a minimum of 6 annas and a maximum of 8 annas per day. The average rate in 1930 is Re. 1 to Re. 1-4-0. Unskilled labour earned in 1907 a minimum of 2 annas 6 pies and an average of 3 annas per day. In 1928 the rate was 10 annas. Rates are affected, but slowly, by grain prices.

Village menials.

The village menials have already been described at pages 118 and 119.

There is no common standard of payment. In Tallagang the payments to *kamins* are always partly, and sometimes wholly, calculated at so much per plough. A very rough estimate gives 2,500 seers as the total yield of a plough for both harvests. There are very few *lohárs*, the *tarkhán* being blacksmith as well as carpenter, but in that case he takes double fees. The almost universal rate is for each *kamín* 1½ seers per local maund of 60 seers or 2½ per cent. of the total produce. In addition there are certain miscellaneous payments per plough (one or two seers of cotton, a basket of *bájra* ears, and a few sheaves of wheat, and so on) amounting, on the whole, for *lohár* and *tarkhán* together to about 39 seers per plough, or a little more than 1½ per cent. of the gross produce. The total, therefore, for these two *kamíns* is in this tahsil 6½ per cent. *Musallis* are not kept as regular *kamins* in Tallagang. The *lohár* very rarely receives any payment on well lands, as he is not concerned in the upkeep of the well and its appurtenances, but his place is taken by the *kumhár* or potter, who provides the pots for the well wheel, and whose dues are about the same as those of the *tarkhán*. The *tarkhán* and *kumhár* on wells each take 1½ seers per maund of 60 seers or 2½ per cent. gross produce, as on *bárání* lands, and in addition certain miscellaneous dues *per well*, *e.g.*, *bájra* ears equal to about 6 seers grain, 4 seers cotton, one or two *kiáris* (or irrigation plot) of tobacco and garden stuff, and wheat equal to about 6 seers. The total dues for each *kamín* on well lands in Tallagang are about 3½ per cent. gross produce. It is not common in Tallagang to pay the other *kamíns* such as the shoemaker, barber and washerman from the gross produce.

CHAP. II, B. — Rents, Wages and Prices. Village menials—concld.

In Pindigheb and Fatehjang, as in Tallagang, one man often combines the duties of *lohár* and of *tarkhán* and gets a double share. The potter is only paid on wells, and not invariably then, for on some wells the pots are bought when wanted. The dues of the potter are the same as for the other menials. Only two menials are paid on any one kind of land. In every circle grain dues are paid from the common heap, and generally in terms of the total produce. In Makhad, however, the dues among Patháns are paid per plough without ostensible reference to the amount of the total produce. In reality the share of produce is nowhere fixed, but varies with the status of the proprietor and the character of the harvest. In addition to the grain dues a few sheaves of wheat, or a lapful of *bájra* heads, or a bundle of maize are always given, and these are always given as a rate per plough and are not a definite share of the whole stock. The Khattar villages are peculiar in weighing their grain, using standard weights, and do not use grain measures. Villages owned by Bugdiál Awáns always give a share which is practically equivalent to one seer per maund, and this practice prevails in all Bugdiál villages in all circles of Pindigheb. The dues of a single *kamín* vary from circle to circle. In the Fatehjang Nála and in the Jandál the average rate is 1½ per cent. of the gross produce. In the Sil Soan 2 per cent. is given, and in the Gheba and Sil Circle 2½ per cent. for each *kamín*. The Patháns of Makhad give eight to ten seers per *kamín* at each harvest per plough. This works out at about 2½ per cent. of the total produce to each menial. In addition to the dues of the two *kamíns* always employed about 1 per cent. is paid to the sweeper (*musalli*). The shoemaker and barber are often paid out of the common heap, but by no means invariably. Their dues are about 1 per cent. About 2 per cent. of the produce is paid to the outside labour called in to help at harvest time. In Attock Tahsíl nearly every village has some different standard for measuring the dues of menials. The plough and percentages of the gross produce are the commonest measures. When the harvest is full, the allowances are liberal: when it is poor they dwindle to a nominal amount. On an average the *tarkhán* and the *lohár* get each about 2½ per cent. of the total produce. In the Chhachh there is a distinct tendency to leave out the *lohár*, and pay him directly for work done. In good years the tenant does the reaping himself, but in good years a reaper is often employed and gets 5 per cent. of the gross produce. When a reaper is not called in the *musalli* often gets an allowance amounting to from 5 to 6 per cent. of the total produce. In all tahsils there is a distinct tendency for these customary grain payments to be commuted into cash, but the change is going on very slowly.

CHAP. II, B.

Rents, Wages and Prices.

The amount of the gross produce absorbed by these customary payments was calculated by Mr. Barry as follows (1927) :—

Tahsil.	Assessment Circle.	DEDUCTIONS ON ACCOUNT OF MENIAL AND ARTISAN DUES.	
		Irrigated crops.	Unirrigated crops.
Attock	..	Rs. 2-8-0 per well wheel.	Rs. 2 per acre.
Tallagang ..	Tallagang	8%	7%
Fatehjang ..	Nála	4%	
	Gheb	6%	
	Soan	5%	
Pindigheb ..	Jandál	4%	
	Makhad	6%	
	Sil	6%	

COMMUTATION PRICES OF STAPLE FOOD GRAINS.

Commutation prices of staple food grains.

The following table shows the commutation prices sanctioned by the Financial Commissioner in his letter No. 92-1-22-6-15291, dated 21st November 1924, in annas per maund. The same prices sanctioned for the last settlement have also been added for the sake of comparison :—

Staple.	PRICES PER MAUND IN ANNAS.							
	Attock.		*Fatehjang.*		*Pindigheb.*		*Tallagang.*	
	1907.	1927.	1907.	1927.	1907.	1927.	1907.	1927.
Tobacco (ordinary).	40	60	..	70	..	70	..	70
Bajra ..	24	31	24	29	24	29	18	26
Maize ..	24	32	23	30	23	30	..	28
Jawar ..	20	28	20	28	20	28	18	28
Moth ..	26	40	22	39	22	39	21	36
Múng ..	36	45	30	43	30	43	26	40
Cotton ..	64	90	64	90	64	90	64	90
Gur ..	56 & 64	64	..	70	..	70	..	70
Wheat ..	30	40	30	36	30	36	32	32
Barley ..	18	26	18	25	18	25	16	24
Gram ..	25	32	25	29	25	29	17	25
Táráméra ..	32	50	31	48	31	48	29	47

CHAP. II, A. — Rents, Wages and Prices.

Commutation prices of staple food grains—*concld.*

These figures are not to be accepted as actuals. They are, however, valuable as a basis of comparison : and as showing what the Revenue authorities consider would be a fair price to assume for the period of settlements. Table 26 of volume B gives the market prices with all their fluctuations.

Section C—Forests.

CLASSES OF FORESTS.

Reserved and Unclassed Forests.

The district is very badly wooded, and, with one exception, the forests are forests only in name. Reserved Forests number 9 and cover 229 square miles. There are no Protected Forests. The Unclassed Forests, in number 35, extend to 142 square miles. The following statements give the names and areas of each forest in the district (Settlement 1927) :—

RESERVES.

Name of Reserve.	Tahsil.	Area in acres.
Kála Chitta	Attock, Pindigheb, Fatteh-jang.	90,394
Kheri Mar	Attock ..	2,829
Káwaghar	..	3,725
Kaulial	..	1,207
Khairi Murat	..	13,267
Mari	..	7,508
Kot Khalan	..	2,223
Chinji	..	15,009
Sakesar	..	10,107

There has been a shrinkage of 2,800 acres in the recorded acreage of the Kála Chitta.

UNCLASSED.

Tahsil.	Name of rakh.	Area in acres.	Tahsil area.	Management.
Attock ..	Attock	4,721	416,781	Deputy Commissioner.
Fatehjang ..	Bagra	268	554,246	Forest Department.
	Dhungi	4,573	..	
Pindigheb ..	Makhad	7,624	959,635	Deputy Commissioner.
	Utrar	2,954		Ditto.

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Forests.

Unclassed Forests—contd.

Tahsil.	Name of rakh.	Area in acres.	Tahsil area.	Management.
Pindigheb—(concld.)	Jabbi	828	..	Deputy Commissioner.
	Tawin	8,717	..	Ditto.
	Rakh Dhok Mila ..	2,220	..	Ditto.
	Naka Kalán ..	1,442	..	Ditto.
	Gokhi	1,001	..	Ditto.
	Torabera ..	2,016	..	Ditto.
	Saulian	4,992	..	Ditto.
	Chhapri	7,668	..	Ditto.
	Trap Narain ..	2,766	..	Ditto.
	Guliál	16,998	..	Ditto.
	Kot Chajji ..	248	..	Ditto.
	Jalwál A ..	338	..	Ditto.
	Jalwál B ..	1,057	..	Ditto.
	Aranwal ..	670	..	Ditto.
	Mán	3,261	..	Ditto.
Tallagang ..	Chinji	171	767,075	Ditto.
	Nakka Kahut ..	1,525	..	Ditto.
	Chak Wahán ..	717	..	Ditto.
	Kalri	272	..	Ditto.
	Bani Rámeshah ..	1,415	..	Ditto.
	Sukhwahan ..	1,074	..	Ditto.
	Amánpur ..	1,387	..	Ditto.
	Nariánwáli ..	2,352	..	Ditto.
	Bhajur ..	1,313	..	Ditto.
	Uchri	703	..	Ditto.
	Dandi	607	..	Ditto.
	Datwál Kalán ..	526	..	Ditto.
	Nára	320	..	Ditto.
	Faizanwáli ..	1,034	..	Ditto.
	Jhatla	285	..	Ditto.

FOREST ADMINISTRATION.

For purposes of forest administration the Attock, Fatehjang and Pindigheb Tahsíls are included in the Ráwalpindi Forest Division, and Tallagang Tahsíl is included in the Jhelum Forest Division. The control of the Divisional Forest Officer, Ráwalpindi, extends to 5 reserves and 2 unclassed forests Bagra and Dhungi in the Fatehjang Tahsíl, but proposals have been made to Government to transfer the unclassed forests of Bagra to the direct control of the Deputy Commissioner. CHAP. II, C. Forests.

Of the forests under the Ráwalpindi Divisional Forest Officer the Kála Chitta alone is of any importance. By far the greater portion of it is in the Attock Tahsíl, but it also extends into Pindigheb and Fatehjang and almost 3,000 acres are in Ráwalpindi Its area is distributed approximately as follows among the several tahsíls in which it lies :— The Kála Chitta.

	Acres.
Attock	57,139
Pindigheb	22,641
Fatehjang	10,614
Ráwalpindi	2,800
Total ..	93,194

It owes its origin to the assertion, at the first Regular Settlement of the district, of the right of Government to the extensive waste land, which from early historic times has been regarded as State property under every dynasty which has ruled the Punjab. Waste, sufficient for the pastoral and domestic requirements of each village in the tract, was marked off, and the remainder reserved as State property. These proceedings resulted in a tentative demarcation in 1865 of an area estimated at 111 053 acres as a Government *rakh* under the control of the Deputy Commissioner. In 1879 the whole area, estimated at 109,787 acres, was constituted a protected forest under the Forest Act, and in 1882 the actual area of the *rakh* was found by the Survey of India to be 98,575. During the Revised Settlement 5,381 acres were excluded from the *rakh*, and in 1890 the remainder, comprising 93,194 acres, was created a reserved forest under the Act. The portions situate in Attock, Fatehjang and Ráwalpindi Tahsíls were placed under the control of the Forest Department in 1871, and the Pindigheb portion in 1887. The entire forest was surveyed by the Survey of India in 1880 to 1882, and maps on a scale of 4 inches=1 mile prepared. On the north the range is of limestone formation, on the south of sandstone. The principal characteristics of the climate are

CHAP. II, C. — Forests. — Kála Chitta—contd.

aridity, great heat in summer, and a considerable degree of cold in winter with occasional occurrence of early spring frosts, sufficiently severe to cause some injury to the indigenous tree-growth, even when in a fairly advanced stage of development. Snow, sometimes, though rarely, falls.

In the early part of 1892 snow lay for some time to a depth of several feet on the higher peaks and ridges. There is no heavy timber. The forest presents essentially the appearance and characteristics of coppice growth composed chiefly of the wild olive, with *phulahi* and *sarnatha* as the chief auxiliary species. The undergrowth is nowhere dense, and consists mainly of *sarnatha, bhekar, garanda, patáki* and *bher*.

In respect of character and condition of the growing stock, the forest falls into three conspicuously marked natural divisions, determined mainly by the combined influence of geological formation and aspect. The tract north of the main ridge, which is by far the best wooded, is covered with olive forest *par excellence*. The slopes with a southern aspect are generally sparsely wooded, but in the valleys and on the northern slopes the forest growth is often dense, though generally rather open. The age of the existing stock varies considerably, the age and size of the trees being greatest in the west, and diminishing eastwards.

In the tract south of the main ridge the predominating species is *phulahi* (*Acacia modesta*). The most prominent feature of this tract as compared with the northern tract is the sparseness of the tree-growth. The hills often have a somewhat barren appearance. In the sandstone region the forest growth is merely a miserable scanty scrub jungle composed mainly of very stunted, much injured *phulahi* bushes associated with a poor growth of *Salvadora* and *Capparis*.

The only kinds of rights, adverse to Government, existing in and over the forest are rights of way and water, rights of pasture, and rights of grass-cutting. Forty thousand five hundred and thirty-four acres are burdened with rights of pasture and grass-cutting. These rights are appendant to 21 adjoining villages, and may be exercised only in respect of the villagers' own domestic requirements, and not for sale, and only in respect of animals which are *boná fide* the property of members of the right-holding village communities. Elephants, camels and pigs are specially excluded from the forest pasturage. The right of pasture is further subject to pre-payment of half-yearly fees, the rates of which are liable to quinquennial revision by Government, and the maximum number of animals of each kind entitled to forest pasture has been

CHAP. II, C.

Forests.

Kála Chitta—contd.

fixed at twice the number actually in possession of the right-holding communities at the time of enumeration during the forest settlement.

Government has reserved the power to change the localities of the grazing grounds within certain definite limits, provided a certain minimum area be uninterruptedly maintained for exercise of the pasture and grass-cutting rights. The right to cut grass may be exercised by each of the 21 right-holding villages only within the locality set apart from time ito time for pasture of its own flocks and herds.

The only produce utilised is firewood, cattle-fodder (grass and tree-leaves), and to a small extent also timber, gum of *Acacia modesta,* and stone for building and manufacture of lime. Firewood is the chief item. The principal market for the produce is Ráwalpindi, where firewood and grass are always in great demand and not readily obtainable at moderate cost from any other source of supply. It is probable that Ráwalpindi could always dispose of the entire annual fuel outturn of the forest, but large quantities of the Kála Chitta firewood are consumed in the minor markets of Campbellpur, Fatehjang, Attock, Hazro, Hasan Abdál, &c. All these markets are situated within twelve miles of the forest boundary, except Hazro and Hasan Abdál, which are a few miles further away. Communications are excellent, and most of the roads are in direct communication with the railway system. The eastern part of the forest is traversed by three roads connecting Fatehjang on the Khushálgarh branch railway, with Sarai Kála, Campbellpur and Hassan Abdál on the main line of the North-Western Railway. The Makhad to Attock road traverses the broadest part of the forest, and in the extreme west, near the bank of the Indus, is the road of the Customs Department. A few miles to the west of the Fatehjang another road, leading from the Gaggan railway station to the village of Jabbi, crosses the forest and connects the Khushálgarh branch railway with the Fatehjang-Campbellpur road. Recently a good road has been constructed through the heart of the forest from Jhalár on the southern border to Akhori on the north.

In addition to these roads many tracks traverse the forest from south to north, and although rough and stony, they are mostly fit for laden beasts of burden.

The system of exploitation is by annual regeneration fellings. About half the forest is not in a condition suitable for exploitation. Elsewhere fellings are executed from November to February, 20 standards per acre being reserved with the object of seed

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production. Improvement fellings and thinnings are not needed. Regeneration is secured by the system of coppice with standards. Vigorous coppicing power is retained by *phulahi* and olive up to a great age. The primary aims of management are the permanent satisfaction of the pastoral requirements of the rightholders, the production of wood suited to the local demand and to the requirements of the neighbouring markets, and the expansion of the commercial value of the forest. The injury done to the forest by fire is too rare and insignificant to be worthy of mention.

An interesting experiment in regeneration is being carried out in Rakh Attock : which has been leased to the Zaildar of Haji Shah on condition that the barren rocks above the Attock Fort be reafforested. The scheme commenced in 1928 : and between one and two lakhs of young *phulahi* have by the autumn of 1930 taken firm root.

Other reserves of the Ráwalpindi Division.

The other reserves of the Ráwalpindi Division are very poor indeed. Káwagar is leased to the Camel Corps at Campbellpur for grass on an annual lease of Rs. 1,000. The Khairi Murat is the largest of these reserves. It is not burdened with rights, but the forest produce is so scanty that exploitation has never been possible, and there is no prospect of the forest being worked for a long time to come.

These reserves are bare hills with here and there a few olive and acacia trees and a little grass.

Unclassed Forests.

The remaining forests are high, barren, pebble ridges, the bottoms of stony ravines with the steep banks on either side, or long strips of bare rocks. Some of them have a little stunted *phulahi* and some scrub jungle, but nowhere is there any appreciable amount of wood. There is no reproduction anywhere, and protection leads to nothing in the way of improvement. A few have some good grass, after rain, but generally grazing is poor. Leases are sold every year. Except in the Reserves, grazing of all animals is permitted on payment of fees.

Some of the rakhs contain a little culturable land. Patches here and there are leased out for cultivation. Forest management gives little trouble. The people have plenty of grazing, and do not encroach much on the forests. The village grazing lands, which are often valuable and well-wooded, are not seldom the subject of violent disputes between the owners and tenants.

All the large landowners make their own rakhs, in which they carefully preserve the wood and grass and allow no one to trespass. It is remarkable to see what an effective control the strong landowners have over their rakhs, and how great a change

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is produced in a few years by strict preservation. These rakhs are very unpopular with tenants, and are often made the subject of violent complaints, so much so that useful village rakhs have sometimes been thrown open to grazing, and ruined, by administrative orders. It is in general unwise to interfere with a work, which is in the main useful, and which, though a trouble to tenants, is beneficial to the best interests of the countryside.

Chirágáhs.

An account of the district grazing resources would be incomplete without a reference to the *chirágáhs* of Pindigheb, Fatehjang and Tallagang Tahsíls. These are areas which were at Revised Settlement set aside by the people themselves for the grazing of the village cattle. Their areas and other particulars are given in the Wajib-ul-arz of each village. It was agreed that they would never be brought under cultivation, but would be enjoyed by all the inhabitants of the village whether owners, tenants or *kamíns*. These areas were generally the portions of the waste then most suitable for grazing : often they were the bottoms of ravines or stretches of land which received moisture. When they were closed as *chirághás* their reservation caused no inconvenience, each man having already as much land as he could with ease cultivate. But with the increase of population an extension of cultivation became imperative, and the best portions of the waste came under the plough. As every one was anxious to extend his cultivation no one objected to the *chirágáh* being broken into, and much of these closed areas have now been broken up. This new cultivation is often the cause of violent disputes. In some villages the non-proprietary body is willing that the restriction on the *chirágáh* should be removed, elsewhere they insist on the maintenance of the grazing grounds. When two owners fall out, and especially in the Pathán *iláka*, it is a favourite method of annoyance for one man to apply to have the other turned out from the land he has broken up from the *chirágáh*. In M. Narrara a typical Pathán case occurred. A prominent owner immediately after settlement broke up a great deal of the *chirágah* and sold the various fields to certain owners in the village. A few years later he applied to have them turned out of the land which he had sold to them, and on their eviction himself entered into possession. In many cases these *chirágáhs* exist only as entries in the Revenue Records. If they had been kept up as grazing grounds, they would have been exceedingly useful ; but now their retention is chiefly a source of dispute and annoyance.

Tallagang Forests.

The Tallagang Reserved Forests lie along the skirts of the Salt Range, the unclassed forests chiefly along the Chakwál border and on the line of the Soan. They consist for the most part of

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blocks of broken waste ground, sometimes of insignificant size cut off from villages which at the time of their formation were thought to have more waste than they required. The reserves are fairly wooded with shrubs and stunted trees, but timber trees are almost always very rare indeed, while many of the *rakhs* produce practically nothing but grass and sometimes very little of that.

The following remarks are taken with some alterations from Mr. Talbot's Jhelum Gazetteer :—

Our present *rakhs* had predecessors before British rule in the reservations, chiefly for sport, of the Janjua Chiefs, and the Sikh Kárdárs, whose example was followed in the unauthorised appropriations of waste with which the Customs official accompanied their assumption of control over the Salt Mines in the early years after annexation. The earliest reservations on a large scale were not, however, effected until the first Regular Settlement, when, partly as a solution of a series of bitter quarrels regarding the ownership of the hills, but partly also for climatic reasons and to provide a reserve of wood and fodder, a large area of hill waste was demarcated by the Settlement Officer and declared to be Government Forest ; it was also notified that Government reserved the right of appropriating, when and wherever it might be found necessary, all uncultivated land in excess of three times the amount of cultivation. It was on this principle that the Deputy Commissioner acted in carrying out the instructions issued in 1864 for a general demarcation of excessive waste in this district, which resulted in large additions to the old reserves, and the creation of a number of new ones : in the case of the more important hill *rakhs* the reservations, though sound on the whole, were faulty in detail, while in the plains the work was carried out with a great want of discrimination. Serious hardship resulted, and in 1875 the evils of the system in force attracting attention, Mr. Thomson was appointed to deal with the whole question as Forest Settlement Officer ; his work resulted in the restoration of several minor *rakhs* to the estates from which they had been taken. Special rights and privileges were carefully enquired into and recorded ; and recommendations made in regard to grazing, fuel, access to water-courses, and the like ; it is largely because his recommendations were subsequently lost sight of that it was found necessary to go into the matter of the management of the forests again at the recent settlement.

As a result of an enquiry during the last settlement of Jhelum District the following orders were passed by the Local Government :—

Management.—In regard to the unclassed forests in the plains, it has been decided that they will be managed by the Deputy

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Commissioner under the rules under the Punjab Laws Act, and not by the Forest Department ; as the interests involved in the management of these *rakhs* are purely local, and they do not lend themselves to afforestation.

Grazing.—The following principles are to be observed, as far as possible, in the management of the grazing in the hill *rakhs*, those *rakhs* being set apart which can be wholly and strictly closed, two-thirds of the others should be open for nine months of the year and one-third should be closed to grazing throughout the year, but open to grass-cutting when necessary, camels and goats being excluded from half the open area ; the grazing value of the *rakhs* to be assessed for five years, and the grazing to be leased to the villages of the neighbourhood, other villages being allowed to graze only on permit or payment of fees. The grazing assessment of a village may be distributed over the village as a whole, or the lease may be held on behalf of the estate by one or a few of the villages if that is preferred ; in case of a breakdown of the system here sketched (and it is doubtful how far it is practical), if it becomes necessary to lease to individuals instead of to villages, the lessee should be carefully selected and should never be a mere speculator : and on no account should the old system of auction sales be reverted to.

The unclassed plains *rakhs* will be offered on five-years' grazing leases to the neighbouring villages : in case of breakdown, the remarks as to the selection of lessees above will be applicable, but in these cases there should be no difficulty.

The authorised scale of grazing fees is as follows :—

Detail.	Maximum rate chargeable by lessees of grazing contracts.	For permits issued departmentally when closed areas are temporarily opened.
	Per annum.	Per mensem.
Camel	16 annas	..
Buffaloes	6 annas	4 annas.
Horses and mules, cows and bullocks	4 annas	3 annas.
Plough cattle	1 anna	1 anna.
Donkeys	2 annas	2 annas.
Goats	1 anna	..
Sheep	½ anna	..
Grass-cutter per sickle	8 annas	16 annas.

NOTE.—Young stock charged half rates ; cattle belonging to outsiders from a distance with no claim on the *rakhs* pay double rates.

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Tallagang Forests—*concld.*

Firewood from the hill *rakhs* can be obtained on permits, issued at or near the spot, at the following rates :—

Camel-load, 6 annas ; bullocks or mule-load, 4 annas ; donkey load, 2 annas ; head-load, 1½ annas for thick wood and 1 anna for brushwood.

These rates are equivalent to about 1 anna per maund, *plus* of course the labour and cost of collection and carriage.

Sale of wood thus procured is prohibited ; and no cutting instrument is allowed within a *rakh.*

The plains *rakhs* contain little wood ; dry wood may be collected by persons using the *rakhs,* subject to the warning that in case of wilful damage to green wood, the system of leasing the grazing to the villages will be suspended.

Wood for ploughs.—Trees fit for ploughs are marked by the Forest Officer, and persons wanting wood for ploughs can take out a permit and select one of the marked trees, to be cut in the presence of the Forest Guard. The rates of payment are 4 annas for large ploughs and 2½ annas for small ones.

Forest fires.—These are very rare ; but should they occur the area damaged would be strictly closed for five years, the dead wood being cut down at once and sold by auction to the highest bidder.

Section D.—Mines and Mineral Resources.

MINES AND MINERALS.

In early days coal was found in the district regarding which the Gazetteer of 1907 wrote as follows :—

Coal.

" Lignite is occasionally met with in small quantities in the Khairi Murat Range, and an inferior description of anthracite is found in small quantities in the Pindigheb Tahsíl, near the banks of the Indus. True coal, and not lignite, has been found in several spots on the north side of the Kála Chitta, notably near the villages of Mungi, Chhoi, Bágh Niláb and Sojhánda Báta, where it was worked by the North-Western Railway. It is found in wedge-shaped pockets or small seams, which, when followed up, gradually taper out and disappear in shale. Some of these pockets at Chhoi and Sojhánda Báta are in the hillsides, while others are in pits from 10 to 50 feet below the surface. The outcrops generally, but not always, occur in water-courses, the scour of the

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water having exposed shale, which on being followed up leads to coal. The coal is very friable, and rapidly crumbles to dust when exposed to the air. This is always the case with surface coal, the superincumbent strata being necessary to solidify it.

In 1882-83 several borings were made in the hills and also in the valley of the Haro. But after the surface shale and coal were exhausted, nothing was found but hard compact limestone in the hills, and sand, shingle and other alluvial deposits in the valley. A large quantity of the coal dust was mixed with cow-dung and compressed into cakes, and so used for burning lime and *surkhi* for which it was found cheaper than either firewood or charcoal. The coal was also largely used in the smithies and other works connected with the erection of the Attock bridge. A ton was sent to the Ráwalpindi Gasworks, where it yielded from 7,000 to 8,000 cubic feet of gas and 13 cwt. of coke, which was considered a very favourable result. Coal is now worked only in the small pockets and seams on the northern slopes of the Kála Chitta. These are all very small undertakings with no effect on the economic condition of the district."

The industry has now died out entirely, though coal is known still to occur in small quantities in the Kála Chitta hills.

PETROLEUM.

In addition to limestone, which is worked for lime and road metal, building stone, and brick clays, the only mineral which occurs in the district in important quantities is petroleum, and oil is now being produced commercially from the Khaur Oil Fields by the Attock Oil Company.

I am indebted to the Attock Oil Company for the following history of the development of the Oil in the Punjab up to April 1929 :—

History of the Development of Oil in the Punjab.

Introduction.

The Khaur Oil field is situated in the Attock District of the Punjab, 43 miles W. S. W. of Ráwalpindi and about the same distance S. S. E. of Attock Fort.

The activities of the Company date back to 1914 when the first well was drilled.

The following note is a brief description of the oil occurrences in the Punjab, together with other companies' work relating to the finding of oil.

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Mines and Mineral Resources.

Introduction —contd.

General stratigraphy in relation to the occurrence of oil.

As with all the other known oil occurrences of India, Burma, and the neighbouring countries the oil occurrences of the Punjab are confined exclusively to rocks of Tertiary age. Tertiary rocks underlie the whole surface of the Potwár, fringed on the north and south by Mesozoic and older rocks which form the main mass of the northern hill ranges and outcrop in a thin ribbon along the Salt Range scarp.

The Tertiary rocks connected with oil occurrences in the Punjab comprise the following members in descending order :—

U. Siwálik.

M. Siwálik—Dhok Pathán Zone.

L. Siwálik—Chinji Zone and Kamliál Zone.

U. Murree.

L. Murree—Fatehjang Zone.

Unconformity.

U. Chharat Stage—Nummulitic Shales, Limestone and Shale.

M. Chharat Stage—Variegated Shales, with "Planorbis."

L. Charat State.

Nummulitic Limestone—Hill limestones.

The unconformity between the upper fresh water Tertiary beds and the lower marine and fresh water beds results in a considerable variation in the succession of the north and north borders of the Potwár. The sea in which the Nummulitic Limestone was deposited extended without interruption over the whole region, and from the contents of the basal conglomerates of the fresh rocks it seems possible that all the Chharat stages were laid over much the same area. They are, however, missing from the Siwálik range section and appear to have been denuded during the period of uplift prior to the deposition of the fresh water series. Immediately under the northern hills the succession is most complete and the hiatus represented by the unconformity least.

The deposition of the lower Murree rocks must have followed the retreat of the Nummulitic sea, but was confined to a comparatively narrow trough along what is now the northern edge of the Potwár. There is some indication that the southern boundary of this area of deposition lay approximately along the line now

marked by the Khairi Murat ridge. The Upper Murree rocks attain a considerable development in the Khaur anticline and the boundary of their area of deposition must have been much further south. Neither Upper nor Lower Murrees are present in the central portion of the Salt Range where basal Siwáliks rest directly on the Nummulitic Limestone.

These conditions have had a pronounced effect on the present distribution of oil in this part of India. From a careful study of all the known seepages it seems probable that the oil originated in every case in the passage beds (Lower Chharat stage) between the main Nummulitic Limestone and the brackish water shales of the Middle Chharat stage. The latter beds appear to have preserved the oil during the period between emergence from the sea and the deposition of the later fresh water beds. This occurred only in the central and western Potwár; in the eastern Potwár the lower Tertiary beds appear to have suffered more severe denudation, the Chharat stages are missing and any oil which once existed there was probably dissipated in the period which intervened between the uplift and the deposition of the Upper Tertiary beds.

The severe compression which the Khaur anticline underwent has realised in the emergence at the crest of much lower beds than in any other anticline in the open folded zone. The rim rocks both from their lithology and fossil contents are known to belong to the Kamliál zone—the lowest fossiliferous zone of the Siwálik system. The beds at the crest are the soft white sandstones and red shales typical of the Upper Murree. Nearly 3,000 feet of these rocks have already been proved by the drill, and at the time of writing the deepest wells show no indication of any lithological change. As stated above the Lower Murree rocks were never deposited as far south as the Khaur axis, and it is believed that the Upper Murree rocks rest directly on the Lower Tertiaries. Unfortunately there are no means of calculating the probable thickness of these beds at Khaur; the extreme complexity of the isoclinal zone in which they are exposed prevents our forming more than a very rough estimate of the thickness of Upper Murree rocks, and even if this were possible we cannot determine the rate of overlap southwards. It seems possible, however, that modern drilling methods will enable us to reach the limestone series, and if so the result will be of great geological interest.

It is possible that the Khaur anticline as developed at present overlies an earlier fold in the limestones, and, if so, certain of the

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upper members of the Lower Tertiary series may be missing from the succession.

The crest of the Dhullian fold is at a considerably higher horizon than that at Khaur, the difference at the surface being estimated at 2,200 to 2,500 feet. The outer rim rocks of this fold are the lowest beds of the Middle Siwálik series.

The oil source.

The source of the oil in the Khaur anticline is believed to be the same as the source rock of the remaining seepages, namely, the Lower Chharat stage. The oil is at present obtained from sandstones in the Upper Murree series and is believed to have attained this position by upward migration, assisted possibly by the longitudinal faults which traverse the crest. The conditions of its occurrence in the field have as yet yielded no definite indication either for or against this hypothesis except that oil in varying quantities has been obtained in all the sands yet passed, and that it shows a progressive variation in composition and character ; the deeper oils have a lower specific gravity and a more complex constitution than the oils produced from the shallow sands.

Oil seepages.

Oil springs and seepages have been known to exist in the Punjab for over half a century but it is only within recent years that production of petroleum on a commercial scale has been obtained. Surface showings of oil are many, being specially noteworthy in the Ráwalpindi, Attock, Jhelum, Shahpur and Miánwali districts.

In 1870 Mr. Lyman surveyed most of the then known seepages, on behalf of Government, in connection with a scheme for lighting Ráwalpindi with gas to be obtained from the heat treatment of the oil. Unfortunately he had no knowledge of geology so that his work, though covering wide areas, was restricted solely to the neighbourhood of the larger seepages and no attempt was made to interpret the geology of these occurrences. In later years there was to come one who was able to put his geological training and experience to good account by the development of an oil field in the heart of the country first surveyed for oil by Lyman.

The seepages are very generally found at the base of the Upper Nummulitic series, or, as they are named after the type section, the lower Chharat beds. Of the exceptions the most important is that of Khaur where the seepages and all the oil so far obtained are found in Murree beds. We have the option of assuming either that the oil is indigenous to these Murree

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beds, which must in that case have been deposited under different conditions from those under which the rest of these series *was* laid down, or that the oil has migrated from the Nummulitic series—either vertically, or by lateral migration from the unconformable junction of the Murree and the Nummulitic series.

Seepages are known in the following areas of the Punjab :—

(1) Chharat including the Sadkal, Bhagwan Kas, Borari Kas and Jafar localities.
(2) Chak Dalla.
(3) Golra.
(4) Ratta Hotar and Saidpur.
(5) Khairi Murat.
(6) Dumniwala (Kundal or Basti Algad area) in the trans-Indus Salt Range.
(7) Jaba, near the north-western end of the Salt Range.
(8) Salgi (Chhitadil).
(9) Sadhewali, Mardwal and Khabakki, in the Central Salt Range.
(10) Khaur.

In 1866, a Mr. Fenner, Executive Engineer, Public Works Department, had seven or eight wells dug in and around the Sadkal seepages. Three of these yielded oil and traces were seen in two of the others. The best yielded 6 gallons of oil daily at 15 feet, and in 1869 was deepened to 35 feet at which 25 gallons per day were obtained. In April 1870, a boring was commenced inside this pit and sunk to 75 feet ; according to Lyman the yield rose to 50 gallons per day decreasing afterwards to 10 gallons.

Some years after the early work of Fenner and Lyman, more ambitious attemps were made by a syndicate headed by the Townsend Brothers, wells being put down in 1890 at Sadkal, at Jaba and at Basti Algad, at the northern end of the Kiri Khasor branch of the trans-Indus Salt Range. Although several of these wells were drilled to upwards of 700 feet in depth very small quantities of oil were found.

In 1913 the Indolex Petroleum syndicate drilled a well alongside the Golra seepages. At 300 feet a show of oil was met ; at 900 feet water was encountered, and partly owing to an accident the well was then abandoned.

The Attock Oil Company, Limited.

It was in the same year that the syndicate, which has since developed into the Attock Oil Company, was founded. Mr. Frank Mitchell had taken out a prospecting license over 7 square miles

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covering the Chharat seepages and had joined with Messrs. The Indo-Burma Petroleum Company, Limited, in the geological exploration of this area. Mr. E. S. Pinfold, the geologist selected for this work, arrived in the Punjab in November 1913. After a detailed examination of the Chharat area the opinion was formed that it was unpromising and that structures more suitable for the retention of oil might be discovered further to the south, where the folding is more gentle. Mr. Pinfold then commenced an investigation of the folds delineated by A. B. Wyune in his paper on "The Tertiary Zone and underlying rocks in the North-West Punjab,"[1] and was favourably impressed with the Khaur structure. It was not until he was actually camped on the crest of the anticline, at the village of Kamliál, that he heard of the presence of the seepage. Since 1866 the Punjab Government and private syndicates had been carrying on an active search for oil over this part of the Punjab, and wells had been drilled at Chharat only 27 miles away. In spite of these activities the Khaur seepage had never been reported.

Besides their mining lease and prospecting licenses over the Khaur area, the Attock Oil Company, Limited, has held several other areas in the Attock, Jhelum, Shahpur and Miánwáli districts under prospecting license. Of these but two have been tested by the drill, namely, the Dhullian area 10 miles W. S.-W. of Khaur and the Gabhir area, north of the Khabakki seepages on the Salt Range. Three wells have been drilled at Dhullian, to depths of 2,018 feet, 2,778 feet and 3,302 feet, respectively; of these the first two were abandoned owing to accidents, while work on the third is temporarily suspended during the present active testing and development of the dome at Khaur. The one test well drilled on the Gabhir area was abandoned at 1,970 feet, owing to the barren hill limestones having been met before commercial showings of oil were obtained; as a consequence of the negative results from this well the Company reduced the area held under license drastically.

Other Exploring Companies.

Other companies which have equipped exploration parties for oil in the Punjab are—

(1) The Burma Oil Company, Limited.
(2) The Whitehall Petroleum Corporation, Limited.
(3) The British-Burma Petroleum Company, and its associate The Rangoon Oil Company.
(4) Frank Johnson and Company.
(5) R. G. Tugwood and Company.
(6) The Consolidated Oil-fields of India, Limited.
(7) The African Construction Corporation, Limited.

[1] Rec. Geol. Sur. Ing. Vol. X, p. 107 (1877).

Of these only the first two have sunk test wells, the first on the Khirpa "Fault-dome" west of Khaur and north-west of Dhullian, and on the limestone dome at Khabakki, the second on the gentle dome structure at Jhatla, north of the Gabhir monocline held by the Attock Oil Company.

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Other Exploring Companies—*concld.*

The Meyal wells, three in number, were drilled to depths up to 4,000 feet without obtaining any trace of oil, the Khabakki test well was drilled throughout the unproductive Hill Limestones into the underlying Jurassic beds, while the Jhatla test was carried to over 6,000 feet without results.

All but the Attock Oil Company, Limited, and African Corporation have now retired from the Punjab, and the former Company is concentrating on the development of its field at Khaur, Dhullian and a prospecting well at Dalwatti.

History of development by Attock Oil Company.

The Discovery Well was commenced by the Attock Oil Company, Limited, in September 1914, and obtained commercial production early in March of the following year. Development was retarded by War conditions though drilling proceeded continuously, and immediately after the War the Company decided that results were sufficiently encouraging to justify the laying of a pipe line and the erection of an extensive refinery at Ráwalpindi, which was opened by His Excellency the Governor of the Province on February 11th, 1922. The winning of the oil since 1922 has not been without considerable anxiety, for at times production has been very low. However, the advent of the new year brought renewed hopes, and the future promises to see a far more extensive development policy than previously anticipated.

The company is also engaged in drilling operations at Isa Khel, and is shortly to extend its programme to the development of a field situated 12 miles west of Khaur.

Since the drilling of the first well at Khaur in 1914, 130 deep and shallow wells have been drilled. The maximum depth so far reached being 3,900 feet.

Gold.

Gold is found in the Indus and in the beds of various streams, tributaries of the Indus. The Reshi, the Síl and most of the large torrent beds in Tallagang are all the scenes of gold-washing, but the profits are very meagre and are already heavily taxed. The industry is carried on almost always by men of low caste, though in one village of Tallagang the ordinary land-owning classes also engage in it. The work is hard, the outturn precarious, and the average profits very small.

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Mines and Mineral Resources. Gold—*concld.*

In the Attock Tahsíl gold is found on the banks of the Indus, and the right to extract the precious metal is granted yearly to a contractor. Rupees 81 was paid for this right in March 1907, but in 1927 only Rs. 47. Gold is also found on the banks of the Reshí, Síl and other streams in other parts of the district.

In Pindigheb licenses are issued at a fixed rate per *dhrún.*

The mode of extraction is simple. Ten or 12 lbs. weight of the sand is placed in a shallow basin-shaped tray, called in the east a *parátra* and elsewhere a *dhrún,* and this is repeatedly washed, the water and the light sand being repeatedly thrown off until a dark deposit with minute shining specks of gold in it is left. Mercury is then added to this, which unites with the gold grains to form a small nodule. The mercury is then detached by the heat of a fire, and a small globe of gold remains. The *dhrúns* are generally owned by one person, and the gold-washing is done for him by paid labourers, who get a share of the profits which varies from Re. 1 per diem down to nothing at all when no gold is obtained. The average does not exceed Rs. 6 or Rs. 7 a month and gold-washing is now less common than it once was, as more permanent employment and certain return is to be got in many forms of ordinary daily labour, the rate of remuneration for which has risen greatly of late years.

Other minerals.

Veined marble (*abri*) is found in the Káwagar hill. It used to be worked into cups and other ornamental objects, but the industry appears to have died out, probably because of the great cost on account of the hardness of the stone and the absence of skilled labour. The pillars in the garden of Bairám Khán at Attock are made of this beautiful stone. Mortars and pestles of *abri* are highly prized.

Limestone.

Limestone is the chief stone of the whole northern portion of the Kála Chitta Range. It is burned by *zamíndárs* and contractors under permits granted by the Deputy Conservator of Forests. Most of the kilns are in the Kála Chitta Reserve and are worked by contractors. The chief purchaser is the Public Works Department, and preference is given to their contractors. The kilns are limited to the amount of brushwood available. The refuse from the fellings, after the firewood cut has been stacked, is generally used for the kilns. Brushwood cut on the roads under construction is also used.

Stone and Cement Works.

The Stone and Cement Works are at Wah. The Wah Cement Company was started in 1918 mainly through the enterprise of Messrs. Killick Nixon and Company of Bombay, who have utilized the exceptionally good natural resources by means of a Factory, which is one of the largest and most up-to-date in Northern

Stone and Cement Works—concld.

India. It finds work for many hundreds of the villagers round Wah: and materially benefits the owners of the site. The Wah Stone and Lime Quarry Company, Limited, is an adjacent but separate concern, which, though small, has its own importance. By introducing modern methods for ballast crushing it has reduced the local cost of road metal by nearly 60 per cent. It affords the group of owners in the *shámilat* of Hassan Abdal a royalty which amounts to some five or six thousand rupees annually besides providing work for a large number of people in the vicinity.

Section E.—Arts and Manufactures.

INDUSTRIES.

Snuff prepared in Hazro is sold throughout India and Kashmír. The shoe-makers of Tallagang have a small export trade in the Miánwáli market. But with these exceptions there is almost no export of manufactured goods, and though many of the cottage industries of the district attain a high standard of design and utility, partly for lack of communications, partly for lack of push no trade has yet developed. The district waits to be " discovered ".

Snuff.

The tobacco crop has been described in detail: and the promising field for development which the crop affords has been indicated. It may be that applied science will be able to cheapen present production and also to introduce the finer grades of tobacco suitable for cigarette and cigar. At present the local tobacco is converted either into pipe-tobacco or snuff. The *zamīndár*, after reaping, usually garners his crop into barns on the fields: and leaves it, sorted into pipe and snuff qualities, to dry sufficiently to bear removal without losing its sap. It is at this stage that the crop is sold: the pipe tobacco to dealers, who may be local or may have come from outside: the snuff tobacco almost invariably to a local dealer. There are some 100 dealers, each employing from two to five, or ten labourers. There are four machines, worked by power, that dispense with labour. The purchased tobacco is stored till it is thoroughly dry: then ground in the watermills into the consistency of coarse flour. The product is placed in a dark room where it is moistened and treated till it "works" in much the same manner as flour fermented by yeast. It is then pounded in a gigantic mortar: dried and screened, the last process by women. The finest and best qualities are made up in tin boxes without any further addition: but the poorer qualities are doctored by the addition of colouring matter and scent.

CHAP. II, E.

Arts and Manufactures.

Snuff—concld.

Hazro tobacco has such a good name that Pesháwar tobacco from the Swábi Tahsíl is sent to be treated, and sold there for export, as "Hazro" tobacco. The nearest railway station is Lawrencepur, nine miles distant by road, and the trade keeps busy a number of carriers whose bullock carts take the laden gunny bags to the station.

Shoe-making.

Tallagang and Pindigheb produce an elegant gold embroidered shoe for the wealthy, as well as the humbler sandal for the poor.

Other village industries.

In Pindigheb, and in Ikhlás, a neighbouring village, there is an industry in painted and lacquered wood-work, clever toys as well as lacquered legs for bridal beds being the best known.

The *phulkáris* made by the *pardah* women of the Chhachh exhibit a very high standard of needle-work, as well as of design and colour.

In Fatehjang there are printers of calico and linen who thus manufacture bed-spreads, table covers and similar articles in fast dyes and with considerable skill. Earthen jars, or *kuzás*, the manufacture of which had ceased in 1907, is again a flourishing local industry.

Pachnand, a village near Tamman in the Tallagang Tahsíl, produces a pleasing saddle cloth known as '*khes*', which can be converted to many uses.

Kot Fateh Khán at one time produced a *durri*, but attempts to encourage and extend the industry failed: and spasmodic success only has attended efforts to introduce the silkworm: and lac.

The *lohárs* of Miánwála, Tahsíl Pindigheb, make padlocks of iron, and stirrups are made at this village and in several places in Fatehjang and at Hasan Abdál. Iron vessels of large size (*karáh*) are made at Makhad, and cost from Re. 1 to Rs. 40 according to size. Baking plates are also made there. Reed matting known as *phúr*, is made in some villages in Attock Tahsíl, and embroidered shoes, *chappris*, and sandals (*kheri*) at Kot, Chauntra, Pindigheb and Hazro.

Country cloth of various kinds is made throughout the district. Blankets are manufactured in considerable quantities in parts of Pindigheb and Fatehjang. The barbers of Fatehjang and Pindigheb engage in the manufacture of *chhats* and *boris*, or packing bags, which are sold in Báwalpindi, Pesháwar, and elsewhere in considerable numbers. Silk work of various kinds is done by the women of the Attock Tahsíl especially. *Phulkáris*

are made in many places, those of Hazro being the best. The stone of the Khairimár hill, known as *abri*, is worked into cups and other shapes in Pind Trer and Kawa, neighbouring villages. Soap of a common country kind is made at Fatehjang and Makhad.

CHAP. II, E. — Arts and Manufactures. Other village industries—*concld.*

In the past the cost of marketing local products has been prohibitive : but now that lorry traffic is running in all directions there is great scope for an enterprising organiser.

Section F.—Commerce and Trade.

General remarks.

The district is conspicuous for its traders : not for its trade. Mention has already been made of the Paráchas of Makhad and Mallahi Tola (Attock), whose operations are world-wide. Thatta and Nára in the Pindigheb Tahsíl are the homes of Hindu bankers with an all-India reputation. The snuff merchants of Hazro deal widely.

But the district itself has no single trade centre nor can it be expected to have till communications now under contemplation are completed and developed. It is true the Railway runs from Campbellpur to Basal : but till the Chhoi bridge is finished the necessary feeder road is lacking : and for practical purposes the Kála Chitta still divides the prosperous northern fraction of the district from the rest. The Soan and the Khairi Murat so cut off the Chauntra *iláqa* that they look to Ráwalpindi rather than Campbellpur. Roads used to be so bad that Jand was till recently a better trading centre than the tahsil headquarters town in Pindigheb. In Tallagang the enormous village of Láwa is more readily accessible from Miánwáli than its own tahsíl.

In consequence, the trade of each tahsíl has had to find its own outlets, and trade has been confined to the exchange of agricultural necessities, and such small luxuries as these produce.

There are those who have visions of Campbellpur becoming a depôt both for Kohát and Mardán : but this dream depends on more factors than even the opening of communications : and though not impossible, is not yet within practical vision. A bridge-of-boats where the river narrows near Sirka, and the trade of Swábi would flow to Campbellpur. Campbellpur is even now a ware-house for Ráwalpindi : and its cloth market supplies Kohát and Hazára. It is the market for most of the Sarwála Circle. Hazro is the market both for food-grains and for the tobacco, and *gur* of the Chhachh. Hassan Abdál in addition to its being a fair sized market for the greater portion of the Nála Circle, receives most of the exportable surplus

CHAP. II, F. — Commerce and Trade. General remarks—concld.

from the villages in the north of the Fatehjang Tahsíl as well. Nearly all the villages to the east of the Gheb Circle in Fatehjang send their grain to Ráwalpindi. Fatehjang is the market for the central and southern parts of the Gheb Circle. In the south-west Kot Fateh Khán is the local market. For the greater part of the Soan Circle Ráwalpindi is the market, though from southern villages sometimes grain goes to Dhudiál on the Chakwál-Mandra line and occasionally to Chakwál itself. In the Pindigheb Tahsíl there are no big markets at all. In a good year if there is any surplus, it is exported from Jand, Pindsultáni Road and Basal. Pindigheb is the market for the villages to the south of the tahsíl. Injra is also a small market, but it exports grain which comes from the villages of Tallagang Tahsíl. In Tallagang the eastern villages send their grain by road to Chakwál or Bhaun. Láwa to the south supplies grain to Miánwáli. A few villages on the south-east send their grain to Lilla Railway Station.

Section G.—Means of Communication.

RAILWAYS.

The North-Western Railway and the Grand Trunk Road both run through Attock Tahsíl from east to west, running fairly close to each other as far as Lawrencepur. Campbellpur is the junction for the Campbellpur—Kundian Branch, a part of which goes to Kohát and other part down to Miánwáli. The Golra—Basal Branch of the North-Western Railway traverses the northern parts of the Fatehjang and Pindigheb Tahsíls running nearly parallel to the Kála Chitta Range. No railway line runs through the Tallagang Tahsíl. The Campbellpur-Kundián Branch of the North-Western Railway, however, passes within a few miles of the western corner of the tahsíl.

It is interesting to recall that the original alignment of the North-Western Railway was altered in 1899, so as to pass through Campbellpur and avoid the four miles of waterless tract through which it used to pass.

ROADS.

In 1907 the Attock Tahsíl was fairly well supplied with roads: in Fatehjang and Pindigheb communications were difficult. In Tallagang wheeled traffic did not exist. Mr. Bosworth-Smith constructed a connection between Campbellpur and the Grand Trunk Road which leaving Campbellpur branches east and west of the Kamra hill so as to debouch on the Grand Trunk Road on the east, a mile from Hatti, on the west just below Gondal. He also drove a through communication from Tallagang through Pindigheb to Basal.

CHAP. II, G. — Means of Communication. Roads—*contd.*

Successive Deputy Commissioners added their share: and there was a special burst of expansion in 1920-21 and again in 1925-28, a period when provincial resources were comparatively flourishing and the Communications Board in a position to render effective help. The District Board raised funds by what was *de facto* a monopoly system on the *kachcha* roads. Motor vehicles can ply for hire only on roads for which they have a road certificate from the District Magistrate, whose duty it is to see that neither the roads nor the vehicles are in a dangerous condition. The District Board would work out the cost of maintenance of a stretch of road in condition adequate to bear the minimum wheeled traffic required for the travelling public: and would then find a contractor to run buses at stated periods, and with maximum fares. After conditioning the road they would recommend to the District Magistrate that the road was fit, and would be maintained fit for traffic, provided that a road certificate was given to their nominee and to him only. They would receive from the contractor such portion of the cost of conditioning and maintenance as seemed equitable. Thus a virtual monopoly was created.

The protection of the district was also insufficient. Raiders from tribal territory made good their escape in 1923 after a profitable dacoity in the Chhachh: and in 1924 from Fatehjang. In 1926 out of a gang of 22 who attacked Hassan Abdál four were killed, and one wounded, captured, and eventually hanged, with a loss to us of one Head Constable killed. The remainder fled, but, thanks to the lack of the roads, the Territorials, who turned out in immediate pursuit, were unable to catch up with them. This incident led to the reconstruction, originally by the District Board, at a cost of Rs. 15,000 of the Basál-Chhoi and thence Chhoi-Campbellpur road, which awaits the structure of a bridge over the Haro to complete it. The road has been taken over by the Punjab Government, who are constructing the bridge.

Roads made motorable from 1925—1930 by the monopoly system were—

Tallagang-Injra.
Injra-Makhad.
Tallagang-Pindigheb.
Pindigheb-Khaur.

Other roads which were opened were—

Mitchell Model Road, Gondal-Hazro,
Garbett Road, Shamsábád-Grand Trunk Road,

CHAP. II, G. — Means of Communication: Roads—contd.

Jalalia-Gurghushti-Hazro.
Nára-Thatta (by the generosity of the Bhagats of Nara).
Fatehjang to Hasan Abdál.
Campbellpur-Mirza (by the generosity of Sayed Gulab Shah).

The Punjab Government have taken over the metalled road connecting Hazro with Campbellpur: a portion of which links with the Grand Trunk Road; and also the road from Basal to Pindigheb. The road from Fatehjang Railway Station to Khaur has been metalled, as has been the Ráwalpindi-Kohát road from Tarnaul as far as Basal. This has opened up the estates of Kot Fateh Khán and Khunda.

Motors have reached Láwa *via* Tráp, Pachnand and Kot Kazi, but the line did not pay and was abandoned.

The monopoly system has been abolished by Government, and the generosity of the Communications Board curtailed. It will be difficult to continue a programme of expansion.

The following is a list of class II and other roads maintained by the District Boards, but only those to which reference has been made are usually motorable :—

Name of road.	Mileage.			Remarks.
	Metalled.	Unmetalled.	Total.	
Class II.				
1. Provincial Arterial No. 8—Hajishah.	6	..	6	M.
2. Hazro-Ghurghushti-Jalal i a	..	9	9	M.
3. Pindigheb to Provincial Arterial No. 10.	..	8	8	M.
4. Láwa to Provincial Arterial No. 10.	..	10	10	
5. Trap-Tamman-Tallagang ..	..	32	32	M.
6. Gondal-Hazro ..	..	8	8	M.
7. Tallagang-Dulla-Ráwalpindi	..	26	26	
8. Galli-Majahad-Sihal ..	..	16	16	M.
9. Tallagang-Kallar-Kahár ..	..	4	4	
10. Khaur-Dulla	..	6	6	
11. Trap-Pachnand-Kot Kázi-Sakesar.	..	44	44	M. (partly)
12. Pindigheb-Tut Nakkar-Kutera-Trap Injra-Makhad.	..	40	40	
13. Nara-Thatta-Basal ..	3	14	14	M.
14. Hasan Abdál-Jhang-Fatehjang.	..	20	20	M.
15. Pindigheb-Jand ..	..	21	21	
16. Fatehjang-Campbellpur ..	..	26	26	
Total ..	9	281	290	

LIST OF ROADS OTHER THAN CLASS II ROADS UNDER THE CHARGE OF DISTRICT BOARD, ATTOCK.

No.	Name of road.	Mileage.			Remarks.
		Metalled.	Unmetalled.	Total.	
	Attock Tahsil.				
1	Campbellpur-Mirza link road ..	1	..	1	
2	Hasan Abdál Railway Station to town.	1	..	1	
3	Wah-Báradari	½	..	½	
4	Hajishah to Chhoi link (Attock Makhad).	..	10	10	M.
5	Section of Hasan Abdál to Usmán Khattar.	..	6	6	
6	Gondal to Shadi Khán ..	..	4	4	
7	Shamsábád link road (Garbett Road).	..	3	3	M.
8	Saman Link Road.. ..	..	2½	2½	M.
	Fatehjang Tahsil.				
1	Neka-Bahtar	..	4	4	
2	Bahtar-Pindi Bahádar ..	..	4	4	
3	Chauntra-Adhwál-Chakbelikhan	..	10	10	M.
4	Chakri-Dhodhambar ..	..	10	10	M.
5	Majahad-Chakri	..	6	6	M.
6	Ráwalpindi-Sihal-Chakri ..	..	16	16	M.
7	Chakri-Salmun-Bhal ..	..	19	19	
8	Fatehjang-Phamra ..	..	12	12	
9	Fatehjang-Sarái Kala ..	..	12	12	
10	Ráwalpindi-Chauntra ..	..	3	3	M.
11	Dhulial-Chauntra . ..	..	5	5	
12	Fatehjang-Kamliál-Chakwál ..	..	20	20	

CHAP. II, G.

Means of Communication.

Roads—*concld.*

LIST OF ROADS OTHER THAN CLASS II ROADS UNDER THE CHARGE OF DISTRICT BOARD, ATTOCK—CONCLUDED.

No.	Name of road.	Mileage. Metalled.	Mileage. Unmetalled.	Mileage. Total.	Remarks.
	Pindigheb Tahsil.				
1	Pindigheb-Tallagang ..	..	28	28	M
2	Pindigheb-Khaur	..	12	12	M.
3	Jand railway station to town Jand.	..	1	1	
4	Kisran branch	..	3	3	
5	Pindsultáni-Makhad ..	..	47	47	
6	Dhok Timor-Pindsultáni ..	..	6	6	
7	Pindigheb-Kot Maleárán ..	..	22	22	
8	Trap-Jand	..	18	18	
9	Pindigheb-Chakri-Maira-Makhad	..	38	38	
	Tallagang Tahsil.				
1	Tallagang-Jhatla-Chinji ..	..	19	19	
2	Akwál-Miál-Kot Qazi-Láwa ..	..	39	39	
3	Tamman-Mial	..	10	10	
4	Dhok Rahmat-Amánpur ..	..	10	10	
5	Jhatla-Bhilomar	..	14	14	
6	Jhatla-Píra Fatehal-Saghar-Sangwála.	..	16	16	
7	Jhatla-Thoha Mehram Khan ..	..	7	7	
8	Thoha Mehram Khan-Dhurnal Kot Qazi.	..	16	16	
9	Taman-Lati-Kot Qázi ..	..	14	14	
10	Dhok Pathán-Mathrala ..	..	8	8	
11	Tallagang-Rupwál.. ..	..	8	8	
12	Sakesar Hill Road.. ..	3	..	3	
	Total ..	5½	482½	488	

HALTING STAGES.

The following statement gives the chief halting places in the district :—

CHAP. II, G.
Means of Communication.

No.	Route. From	Route. To	Halting places.	Distance in miles.	Remarks.
1	Grand	Trunk Road	Hasan Abdál ..	7	2 Rest-houses, encamping ground.
			Hattián ..	18	Rest-house, encamping ground, Sarai.
			Gondal ..	6	Rest-house.
			Attock ..	7	Rest-house encamping ground, 4 Sarais. Ferry. A very grand bridge to cross the Indus.
2	Tarnaul ..	Khushálgarh	Fatehjang ..	..	Rest-house, encamping ground, Sarai.
			Gaggan ..	10	Encamping ground.
			Kamilpur ..	13	Ditto.
			Pindsultáni ..	6½	See No. 2.
			Jand ..	10	Ditto.
			Khushálgarh ..	7	Encamping ground on Kohát side.
3	Basal ..	Tallagang Road.	Basal ..	..	Rest-house, Sarai.
			Miánwála ..	11½	Rest-house.
			Dandi ..	11	Rest-house, encamping ground.
			Dhok Pathán ..	13	Ditto.
			Kot Sarang ..	8	Encamping ground.
			Tallagang ..	10	Rest-house, Sarai.
4	Tallagang Láwa.	Láwa and Sakesar.	Miál ..	19	Rest-house, Rais Khana.
			Láwa ..	19	Rest-house.
			Sakesar ..	14	Rest-house, Sarai and Munshi Khana.
5	Fatehjang	Trap ..	Kot Fateh Khán	12	Encamping ground.
			Thatti Núr Ahmad Shah.	10	Rest-house, encamping ground.
			Dandi ..	13	Ditto.
			Nakka Tut ..	11	Ditto.
			Trap ..	18	Ditto.

CHAP. II. G.

Means of Communication.

Waterways.

The only navigable waterway is the Indus River which forms the western boundary of the district fo 96 miles. It is navigable for large boats of small draught as far as Makhad, which is in the south-west corner of the district and to which the steamers of the Indus Valley Flotilla used to ply. Country boats indeed used to go as far as Attock: but except in certain seasons the navigation of the river between Makhad and Attock is dangerous as well as difficult. The opening up of the railway killed the trade.

Ferries.

The only ferry controlled by the District Board is that at Makhad. There is a regular ferry at Attock, and there is a *jagír* which is the hereditary privilege of the ferrymen. The shares are now small: and lapse, unless the *jagírdár* works himself or has a definite substitute.

All other ferries are controlled by the North-West Frontier authorities. They ply at Bagh Niláb, Sujhanda Bata, Pari, Nara, Dandi, Mari Japwál, Khushálgarh,. Ziárat Bela, Rakhwan and Kani.

Sarnais.

Sarnáis, or inflated cow skins, are also used for crossing the Indus at the following places:—Sujhanda-Bata, Khura Khel, Garhi Matanni, Waisa, Painda, Kámilpur Alam, Daman, Mallah, Aba Bakr, Adalzai, Tatari, Salem Khan, Asghar, Yásín, Momanpur. Shádi Khán, Harun Jaláliá, Abdul Rahman, and Shinka, all with the exceptions of Sujhanda-Bata above the Attock railway bridge, are in the Chhachh *iláqa*. These *sarnáis* consist simply of a large inflated skin with a strap to go across the neck, and one for each of the rider's legs to be thrust through. The skin can be inflated at pleasure, and their owners will cross even rapid and dangerous rivers on them with great skill.

Post and Telegraph.

A list of Post and Telegraph Offices will be found in statement 31, of the statistical volume. The opening of a combined Post and Telegraph Office at Láwa brought this distant but important village under closer control and into easier touch with the outer world: but is only one of many instances of the forward policy of the Postal Department which is greatly appreciated in the district.

CHAP. II, C — Means of Communication.

TELEPHONE.

Even more important has been the opening of the Telephone system between *thánas*, the areas of which are liable to raid from transborder dacoits. The following *thánas* are linked:—Hassan Abdál—Fatehjang—Pindigheb — Pindsultáni — Campbellpur — Hazro—Hassan Abdál. The introduction of the system was one of the consequences of the Hassan Abdál dacoity in 1925, the last of the series of raids on that magnitude,—a fact which of itself has justified the expense.

Section H.—Famine.

Causes and liability.

The only cause of real famine is failure of the rainfall. The great proportion of the population live on the land, and high prices in other parts of the province do not cause distress here. Migration into the district is small, and the increase of population far from abnormal. Of course calamities, such as hail and locusts, have caused distress; but famine has always been due to failure of the rains.

Much of Attock Tahsíl is secure from famine. The Chhachh with its wells is almost completely so. Only portions of the Sarwála and Nála can be called insecure. In Fatehjang Tahsíl the Soan *iláqa* alone is moderately safe. The whole of the rest of the district is quite insecure. It depends entirely upon a precarious and always scanty rainfall, which must be timely to be beneficial. Untimely rain means scarcity: failure of the rains positive distress. Actual starvation is unknown. The district is so sparsely populated that, although it suffers periodically from drought, real famine is exceedingly rare.

Famine before British rule.

Popular memory recalls three famous famines prior to British rule. The three years' famine ending with the year 1783 A.D. (Sambat 1840) is commonly known as *chálíswán*. Wells and springs dried up, wheat could not be had for 3 seers the rupee, and the mortality among the people and the cattle was great. The two years' famine ending in June 1813, when wheat sold at 7 seers, was not in severity equal to the previous one. The third famine was a two years' complete failure of crops ending September 1834. Wheat rose to 14 seers, then a very high price, and the distress and mortality were very great. The year 1833 A. D. (Sambat 1890) was known as the *markán* year. A plant of that name sprang up spontaneously everywhere in great abundance as soon as the first rain fell, and afforded great relief to both cattle and human beings. Of the famine of 1880 there is no record available.

CHAP. II, H.

Famine.

Within recent times scarcity reached the pitch of famine only in 1896-1897 and in 1899-1900.

The Famine of 1896-97.

In 1896 the rains failed. In many parts of Pindigheb there was not enough moisture for sowings, and all the tanks dried up. Previous harvests had been bad. The kharif failed. A heavy fall of rain allowed late rabi sowings in Fatehjang, but in Pindigheb there was no relief. The rabi crop was very bad everywhere. The distress was most among the cattle. The people could obtain food, but there was nothing for the cattle. The poor people did away with their sheep and goats. The more enterprising drove off their cattle to Jammu and Kashmir. Test works were opened in October, 1896, and remained open for six months. But workers were never plentiful, and the average number of workers in Fatehjang Tahsil in January, 1891, was only 17. Fatehjang was the only tahsíl in which test works remained open for some time. In that tahsíl in February the number of workers had risen to 69, and in March the Deputy Commissioner ordered the gang piece-work system of relief to be started in Attock, Fatehjang and Pindigheb in connection with a number of approved tanks. The rates of labour were Rs. 2-8-0 per 100 cubic feet for digging and carrying. In March, works were at a standstill everywhere except in Fatehjang Tahsíl, where the numbers employed reached 157. Elsewhere the works had to be suspended as they were not resorted to, and did not prove the existence of famine. By the beginning of May the existence of famine was not felt, and there was no acute distress, except among the cattle. Large amounts were distributed in June and July 1907, to supply seed grain and to replace the cattle lost, and the district gradually resumed its old life.

The scarcity of 1899-1900.

The famine of 1899-1900 was not so severe as its predecessor. The monsoon of 1899 failed all over the Punjab, and these dry *báráni* tracts shared the universal fate. Both crops failed. Tanks and even wells dried up, fodder failed, cattle died, and tenants wandered away in search of employment. The year was one of great scarcity and distress. Up till the 7th November it was not considered necessary to start relief works. When they were started at the sanctioned relief work rates (two annas to each man, one anna six pies to each woman, and one anna three pies to each child between seven and twelve years of age) no one was willing to work at these rates. Finally, on 9th February 1900, the Deputy Commissioner reported that it had not been necessary to start famine relief works in the district. To provide for the cattle, however, the forests and rakhs, including all the reserves which had not been leased to contractors for grass cutting or grazing,

CHAP. II, H.

Famine.

The scarcity of 1899-1900 —*concld.*

were thrown open to grazing at fees reduced to half the usual rates. In additon, preparations had been made to obtain a supply of grass from Bombay Presidency, but by the end of March the famine was nearly over. Large sums were distributed under the Agriculturists Loans Act, but figures for the various tahsíls are not available. Arrangements had been made to send 15,000 men to the Jhelum Canal to find relief for them there, but this measure did not prove necessary.

The chief security against famine is that the non-agricultural population is small, that the big owners can themselves weather the storm, and are expected to tide their tenants over the time of distress, and that much of the district supplies can be brought in from outside with fair celerity.

Famine in the sense that it was known in the old days has disappeared, but acute distress is not infrequent, particularly in the Tallagang Tahsíl. There were three very bad years in rapid succession in 1915-16, 1918-19 and 1920-21, in each of which all reserves were exhausted. In the two years ending March 31st 1922, 73,000 maunds of food grains were imported to Injra. Famine test works failed to attract because labour preferred to migrate and earn the higher wages the colonies afforded. But the country side fell under a load of debt which weighed it down for several years.

How cattle are dealt with in a lean year has already been noted. In Tallagang, the most precarious tahsíl, distances from the Railway Station are so great that the usual relief by means of fodder concessions is inadequate. The real remedies are first, when fodder is plentiful thrifty consumption, and careful conservation of the surplus, and second the maintenance and improvement of communications for wheeled traffic.

CHAPTER III.—ADMINISTRATIVE.

Section A.—Administrative Divisions.

Revenue Administration.

CHAP. III. A.

Administrative Divisions.

Tahsils.

The district forms part of the Ráwalpindi Division, and is in the charge of a Deputy Commissioner under the control of the Commissioner of the Ráwalpindi Division. The Deputy Commissioner's headquarters are at Campbellpur. There are four tahsíls with headquarters at Campbellpur, Fatehjang, Pindigheb and Tallagang. The first takes its names from Attock, the old tahsíl headquarters; the others are known by the names of their present headquarters. Each is in charge of a Tahsíldár assisted by a Naib-Tahsíldár.

Kanungos and Patwáris.

Under the Tahsíldár and Naib-Tahsíldárs are the Girdáwar Kanúngos, who again supervise the Patwárís. The staff at the headquarters of each tahsíl includes, besides the Tahsíldár and Naib-Tahsíldár, one Office Kánúngo, one accountant (*wásil-báki navís*), one clerk (*siáh navís*), a sub-treasurer, clerks for the Tahsíldár and Naib-Tahsíldár's courts, an overseer, peons and menials.

The following statement shows the Kánúngo and Patwári establishment for each tahsil and for the whole district :—

Tahsil.	Patwaris.		Kanungos.	
	Patwaris.	Naib-Patwaris.	Office Kanungos.	Field Kanungos.
Attock	61	4	1	4
Fatehjang	60	3	1	3
Pindigheb	60	3	1	4
Tallagang	56	2	1	3
Headquarters ..	..	..	2	..
Total District ..	237	12	6	14

There has been an increase of 40 Patwáris and four Field Kánúngos since 1907 when a Patwári's charge included on an average 3 villages in Attock Tahsíl, 4 villages in Fatehjang, 3 villages in Pindigheb and 2 villages in Tallagang. Pay is on the provincial scale: and there are no allowances peculiar to the district. There are at Sadr a special Kanúngo and a Sadr Kanúngo.

Village Headmen.

Each village has its headman or headmen, who are paid by a grant of 5 per cent. of the village revenue demand. The total of lambardars in the district was 1,535 in 1907. During the course of Settlement operations (1923-27) 16 *lambordari* posts were brought under reduction. In the Pathán villages, especially in the Chhachh tract, the number of the lambardars is frequently excessive, but the division of the villages into various *tarafs* and *pattis*

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Administrative Divisions.

Zaildárs.

on the one hand, and family feuds on the other, make reduction impracticable.

Lambardári is a hereditary office. *Zaildári* is not, so that when a Zaildár dies, the best man for the appointment is selected irrespective of any relationship with the deceased. ' Graded *Zaildári* ' provides for certain grades, so that a newly appointed Zaildár will enter the bottom grade, and receive promotion in accordance with vacancies on the one hand and the quality of his work on the other. But in Jhelum, and in the Tallagang Tahsíl of this district, which used to belong to Jhelum, there prevailed a system of ' Ilákadárs ' or hereditary Inámdars, a system best understandable as a hereditary *Zaildári*.

In the Attock Tahsíl, the graded *zaildári* system was introduced in Mr. (now Sir Montagu) Butler's Settlement in January 1905 : in the Fatehjang and Pindigheb Tahsíls during Mr. Kitchin's settlement in February 1907. In order to improve the *Zaildári* allowances after the Great War and to equalize the position of the Zaildárs in the Attock, Fatehjang and Pindigheb Tahsíls some further alterations were sanctioned in August 1918.

In Mr. Barry's settlement sanction has been obtained to the bringing of the Tallagang Zaildár into line with the rest of the district. Hereditary rights to *ináms* and successions will be preserved and maintained, where necessary, by the grant of personal *ináms*. But if the entitled family fail to produce an adequate Zaildár, their right to the *inám* will disappear.

Some of the *zail* boundaries were also revised with the approval of the Commissioner. The changes made in number and grading have resulted as follows :—

Tahsil.	LATE SCHEME.									NEW SCHEME.						
	Grade.									*Grade.*						
										Rs. 495.						
	Rs. 495.	Rs. 250	Rs. 218.	Rs. 200	Rs. 175.	Rs. 150.	Rs. 125	Rs. 100.	Rs. 75.	Life for Rs. 125.	Special for Rs. 20.	Rs. 350.	Rs. 300.	Rs. 300.	Rs. 250.	Rs. 200.
Attock ..	..	3	..	4	1	4	..	..	..	..	..	..	2	3	3	6
Fatehjang	..	3	..	3	..	4	..	2	..	..	..	..	1	2	3	5
Pindigheb	..	3	..	5	..	5	..	..	.	..	..	..	1	2	5	5
Tallagang	1	1	1	6	..	5	1	3	1	1	1	1	1	3	5	6
Total Zaildárs and Ilákadárs.	1	10	1	18	1	18	1	5	1	1	1	1	5	10	16	22

The district staff in 1907 consisted of the Deputy Commissioner, who is also District Magistrate, an Assistant Commissioner, who was in charge of the Sub-Division including the

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Administrative Divisions.

Pindigheb and Tallagang Tahsíls, and three Extra Assistant Commissioners, of whom one was also Revenue Assistant. The Civil Surgeon was Superintendent of the Jail. There were 2 Munsiffs for the disposal of civil case work.

District Staff.

The present staff (1930) is—

One Deputy Commissioner,

The Sub-Divisional Officer, Pindigheb, who is also Revenue Assistant for this area,

Six Extra Assistant Commissioners of which one is in charge of the Treasury and one is Revenue Assistant.

As communications open, work increases.

There is one Civil Surgeon, five Assistant Surgeons and one Medical Officer of Health, as well as Sub-Assistant Surgeons in charge of the 32 rural dispensaries.

In spite of its excellent operating theatre and equipment, the Lady Doctor in charge of the Josephine Hospital is also only of the grade of Sub-Assistant Surgeon.

Court of Wards.

There is one Manager for the two estates under the Court of Wards. The average income of Rab Nawaz Khan is Rs. 18,000 and of the other estate Rs. 10,000, of which one-half goes to Muhammad Hayat Khan, son of Nawab Khan and one-half is divided between his nephews Ifzal Ahmad and Iftikhar Ahmad Khan. The estate is purely agricultural; and the income derived from rents. The former estate is free from, the latter encumbered with, debt.

Section B.—Justice.

CRIMINAL JUSTICE.

The judicial work of the district is in charge of the District and Sessions Judge.

Stipendiary agency.

The staff for the disposal of criminal cases is the District Magistrate, 7 Magistrates of the first class (the Sub-Divisional Officer, Pindigheb, and the 6 Extra Assistant Commissioners), the 8 Tahsíldárs and Naib-Tahsíldárs, and Honorary Magistrates. The Tahsíldárs have magisterial powers of the second class, and the Naib-Tahsíldárs powers of the third class.

Honorary agency.

Powers of Honorary Magistrate, 1st class, are held by the Honourable Khan Bahadur Captain Sikandar Hayat Khan, M.L.C., at Wah, but his duties as Honourable Member for Revenue do not permit him to exercise his powers. Similarly the first class courts of Sardar Muhammad Nawaz Khan at Kot Fateh Khan and Khan Bahadur Muhammad Amin Khan, O.B.E., M.L.C., not infrequently have to enjoy vacation. Sardar Bahadur Captain Ajab Khan, O.B.E., O.B.I., I.O.M., works fairly regularly at Shádi Khan. Khan Bahádur Muhammad Amir Khan of Pindigheb

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Justice.

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and Khan Sahib Mian Sher Muhammad Khan of Háji Shah exercise second class powers. Third class powers are exercised by the Agent of the Kot Estate, the Bench at Campbellpur, Malik Allahyar Khan, son of the Nawab of Pindigheb, and Khan Sahib Malik Muhammad Khan of Tamman.

Crime.

The district is remarkably free from organized crime : but the hot tempers and quick pride of the tribes result in an undue number of crimes of violence. In a recent year there were as many executions in the Campbellpur Jail as there were murders reported in the United Kingdom. And if a Sessions Judge has a reputation for leniency, the butcher's bill invariably increases.

For the rest, crime is dealt with fully in the section "Police."

Civil Justice.

There are one District Judge and three Sub-Judges for Civil work, which for a district of this size is not heavy. One court is at Pindigheb. Suits for dowry and money suits, and occasionally suits relating to the title in land, are the most usual.

Local Bar.

There is a Public Prosecutor (Rs. 750 grade) : and a bar which has risen from the one Barrister, ten Pleaders and four Mukhtars of 1907 to a strength of three Barristers, twelve Advocates, and twelve pleaders. There are also ten Pleaders working at Pindigheb.

Registration.

The Deputy Commissioner is the Registrar, and he is assisted by an Honorary Registrar at Sadr. In the tahsíls each Tahsíldár is a Sub-Registrar. The value of registration is becoming increasingly felt, and the number of wills registered is interesting, but registration of leases is still confined mainly to urban properties.

Section C.—Land Revenue.

VILLAGE TENURES.

The following statement shows the village tenures as broadly classified at the recent settlements :—

Tahsíl.	PRIVATELY OWNED.								Owned by the State.		Total.	
	Zamindári.		Pattidári.		Bhaichára.		Total.					
Settlement	3rd	4th	3rd	4th	3rd	4th	3rd	4th	3rd	4th	3rd	4th
Attock	13	11	100	101	81	85	194	197	6	6	200	203
Fatehjang	26	26	61	61	117	117	204	204	7	8	211	212
Pindigheb	9	10	6	6	118	118	133	134	22	21	155	155
Tallagang	1	2	6	6	78	78	85	86	18	17	103	103
District	49	49	173	174	394	398	616	621	53	52	669	673

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Zamíndári estates are those owned by a single proprietor, or in common by more than one; *pattidári* villages are those in which each proprietor owns not the particular fields which he holds, but a specific ancestral share in the whole estate; *bhaiachára* villages are those in which every man is owner of only as much land as is in his possession, or as it is commonly put "possession is the measure of right." Few of the villages correspond exactly to any one of these types. Many of them are a mixture of two of them, with the characteristics of one class predominating. Many of the *bhaiachára* villages are divided into *tarafs*, and in some of these villages, though classed as *bhaiachára*, the measure of right in one *taraf* may be possession, while in the rest of the village right follows ancestral shares. It is only in those parts of the district where outside interference, especially Sikh interference, was least, that the villages closely approach any one type. The tendency is for all villages to become *bhaiáchára* estates. The number of owners in a *zamíndári* estate increases and sooner or later the joint holding is split up on shares. The estate then becomes *pattidári*. Gradually the lands held by each shareholder become more and more unequal in value and extent, and possession diverges widely from ancestral shares. It then becomes necessary to do away with the old arrangements by shares, and to recognise possession as the measure of right, though for certain purposes, such as *malba* payments, the owners sometimes elect to continue to be bound by the old shares. The *zamíndári* estates are chiefly those belonging to the big Jodhra, Gheba and Khattar landowners. There is only one *zamíndári* estate in Tallagang, and that is owned by Sayyads. The six *pattidári* villages are owned by Gakkhars and Janjuás. All the Awán villages are *bhaiachára*. Of the 26 Fatehjang *zamíndári* villages 21 are in the Gheb *iláqa*, and are owned by the Sardar of Kot and other big Gheba proprietors. All the Pindigheb *zamíndári* villages are owned by the Jodhrás. There is not a single *zamíndári* village in the Makhad *iláqa* and only one in the Jandál. The *zamíndári* villages of Attock Tahsíl are mainly in the Nála circle and are owned by Khattars. *Pattidári* tenure is more common in Attock Tahsíl than *bhaiachára*, the owners in these villages being Patháns and Khattars. With very few exceptions all Awán villages are *bhaiachára* estates. Some of the villages, *bona fide* estates held by the one proprietary body, are, especially in Tallagang, of enormous size, probably larger than in any other part of the Province. Láwa, for instance, exclusive of the great Láwa *rakh*, now included in the Government estate of Rakh Sakesar, is 16 miles long and 14 miles broad. Thoha and Trap are a little smaller, and there are many villages which have about 10,000 acres. Narrara, which is the largest village in

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Land Revenue.

Pindigheb, has an area of 75,442 acres. Their position as Chiefs of these enormous villages gives many of the headmen an importance not known among the peasantry elsewhere. In these huge estates the whole inhabitants are not massed together in one village site, but most frequently the actual cultivators of the soil live in scattered hamlets. There are sometimes as many as 30 or 40 of these hamlets in a large estate, some of them mere farm-houses, others considerable villages. In many cases it was found just or necessary, at the time of the Regular Settlement, to form such *dhoks* into separate estates paying a small annual sum to the parent village. But this was done usually only when the cultivators proved a more than ordinary degree of independence of the superior tribe. Where, however, both the villages, the parent as well as the *dhok*, were of the same caste, the Settlement Officer allowed separation when claimed by the *dhok*, if he considered it strong enough to stand by itself.

Tenures.

It is a common-place to say that tenures owe their present form to the action taken by the Revenue officials at the Regular Settlement of Ráwalpindi and Jhelum Districts. Rights had never been clearly defined or understood, ancient disorders and Sikh rapacity had produced the greatest confusion and wiped out from men's minds the memory of former relations. But in each district the confusion was least precisely in those tahsíls which are now included in Attock District. In consequence, the land tenures of the district present few features of complexity. In the ordinary village there is the landowner who pays the revenue, occupancy tenants who generally pay in kind at the same rate as tenants-at-will, and tenants-at-will who always, except in Attock Tahsíl, pay in kind.

The various forms of proprietary tenures known as *talukdári*, *álá* and *adna malkiyat* (superior and inferior proprietorship), the *chaháram* tenure and the *málik kabza* are all more or less the result of the unsettled state of proprietary rights in the village of the district at the time of the commencement of the British rule. In many cases these tenures represent a compromise between the claims of the older proprietors and those of the persons in possession at the time of the first Regular Settlement, who had borne the heat and burden of the day, had paid the Sikh demands, and were undoubtedly worthy of great consideration. But Sikh rule was established later in this district than further east, and was never so fully developed. Proprietary right, on the arrival of the British Revenue officials, was found to be a matter of less uncertainty than in Ráwalpindi and Jhelum. In Tallagang apparently

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the typical dispute was when an Awán family claimed to have superior right over the rest of their brotherhood. The claimant would show that, though the defendants were his relations, he had ruled the village entirely alone, and that under our rule he had taken grain rents even from his own cousin. But proprietary right of some sort was generally admitted. In the whole of Pindigheb and parts of Fatehjang and Attock, the Sikhs had maintained the proprietary body in much their old position. At Regular Settlement, rights in property were found fairly well defined. In the central tahsíls popular opinion recognised the big families as owners of the whole countryside and recognised the cultivating body as merely having a right of occupancy. Where the Jodhrás, Ghebas and Khattars claimed proprietary rights they were in general admitted and recorded. But in Pindigheb the Maliks failed to realise the new value of proprietary rights, hitherto a burden, and ownership passed to the old cultivators. In Attock Tahsíl, it is true, some tribes, such as the Tarkhelis, had been subdivided, driven to their Gandgarh fastnesses, and dispossessed of all their rights in this district; but there too the Sikhs caused less disturbance than usual.

Superior proprietors.

In some villages at Regular Settlement, one class of persons was declared to be owners of the village, and the settlement of the estate was made with these, while certain others who had claims upon the estate were declared to be entitled to receive a *talukdári* allowance from those declared owners. Sometimes these rights were decreed in favour of a person or a family, sometimes in favour of a number of persons of one tribe. In addition to these *talukdárs*, the frequent disputes about the ownership of villages led to another distinction, and we frequently find *álá máliks* and *adna máliks* in the same village. The rights of *álá máliks* are not uniform. In Pindigheb the *álá máliks* sometimes are entitled to share in the common lands, but commonly they merely receive a *talukdári* allowance; the *adna máliks* being the actual owners and the persons settled with, and the only ones entitled to share in the common lands.

In regard to *talukdári* allowances, Colonel Cracroft said in his Settlement Report:—

"There have been few large cases in which *talukdári* allowances have been awarded to superior from inferior proprietors. The generality of these awards have been in recognition of superior rights exercised by some classes, who, though now debarred from the management of the estates, yet received by prescriptive right certain dues, which they had acquired either from being rulers of the country, or from being managers during

Sikh rule, or from being the real proprietors but dispossessed and receiving these small dues in acknowledgment of their original right."

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Talukdári tenures.

The *talukdári* tenures are found in estates, and take the form of a surcharge on the revenue, varying from one pice to four annas per rupee of revenue. The total *talukdári* payments are Rs. 2,581. The recipients are usually the representatives or members of the leading family of the dominant tribes, who were generally allowed these dues as the last vestige of their former ownership or lordship of the villages which pay them. They have been recognised at successive settlements, and, having become stereotyped, are not open to dispute. The *talukdárs* are sometimes *álá máliks* of the village, and as such own all uncultivated land and have been recorded as *álá máliks* in the papers. Elsewhere, they have no rights of any description in the *talukdári* villages, except to receive these dues, and they have nothing to do with the payment of the revenue.

In a few villages, notably at Makhad and at Bhalot in the Fatehjang Nála, are found inferior proprietors paying a share of the grain to the superior proprietor who engages for the revenue. In Makhad indeed there are inferior proprietors, occupancy tenants and tenants-at-will, all paying exactly the same kind rents. The *talukdári* tenure is unknown in Attock Tahsíl.

Chahâram tenures.

Chahárams figure frequently in the history of the district. The *chahâram* was simply the grant of one-fourth of the revenue in kind taken by the Sikhs to certain tribal chiefs and headmen, for their assistance in collecting it and for their general aid to the Sikh administration. It was thus essentially an alienation of revenue, for the Sikh took all that could be got from the cultivators, leaving nothing to them from which such a claim could be paid.

The claim of certain of these to *chahárams* was recognized by the British Government on accession to power over this district, and the allowance was made in various ways. It was much discussed whether these *chahárams* were alienations of revenue or of proprietary profits, and the matter was finally dealt with, by giving to those, whose, claims were recognised, *talukdári* rights over the owners, and an *inám* from the Government revenue. The principle applied was that, as the people were no longer rack-rented and unable to bear any share of the burden, it was fair and right that they should pay a share of these allowances from the share of profits now left to them by an equitable assessment.

The Maliks of Pindigheb were the principal claimants of *chahâram* allowances, and their case was made the subject of a

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Chahárам tenures—*concld.*

special report upon which the orders of Government issued continuing very liberal allowances to the then Maliks, and also making liberal provisions for their descendants. In certain other cases in which similar claims were made, *ináms* were granted to the claimants in lieu of *chahárams,* but these arrangements ceased on the death of the *inám*-holders. Ordinarily *chahárам* dues give no rights whatever except to the cash collections. In a few villages, however, the Maliks of Pindigheb are recorded as having a right to take a share of gram crops, and sometimes a share of produce. These rights are often the subject of litigation.

Liki tenure.

A curious tenure, which prevails in certain Pathán villages of the Chhachh, remains to be noticed. It is that known as the *likivand* to which the Pathán, who is always loth to abandon old customs, continues to cling. To the curious mentality of the Pathán is due the fact that he prefers a complicated system of rents, varying according to the nature of the crops sown, to simple cash or *batái* rates. Similarly he prefers *likivand* tenure to other more economical systems. The origin of the *likivand* lies in the fact that in a good deal of the Chhachh the land nearer the river is much inferior to that further away. Most of the villages thus consist of very long, narrow strips. Some of them thus have their northern parts in the sandy land near the river. Further south comes much better *maira* land, then the *lus* and, lastly, the *chel sailáb.* The same method was followed in dividing up the land between the different families in the village, each family being given a long strip. Further sub-division of these strips has taken place in the course of time, always length-wise, and now we find what are known as "*thals,*" *i.e.*, strips nearly half a mile long and only 20 or 30 yards wide, each with a large number of shares in it. Usually only the outside boundary can be seen on the spot. The breadths taken by the different sharers are measured by spans. This system of division has the advantage that every man gets the same share of the good and the bad land and can have no cause for complaint. The nature of the Pathán being what it is, it would be difficult to devise any other method which would satisfy him. Another advantage is that these very long, narrow fields take less time to plough as the plough has to be turned four or five times only whereas in a square field of the same area a great deal of time would be wasted in turning. The great disadvantage of the system is that it renders well sinking extremely difficult. In many villages where the different families or owners have not been on good terms with each other, all attempts to effect the exchanges necessary for getting a compact block fit for well irrigation have failed, and the number of wells has remained practically what it was three decades ago. In such cases the *likivand*

system is a serious obstacle to development. With the advance of education and more enlightened ideas it is possible that the Co-operative Credit Department may in time be able to do something on the lines of the work on consolidation of holdings done elsewhere, but the difficulties would be great, and the official deputed for the work (who ought to be a Pathán) would have to be very carefully selected. *Likh tenures —concld.*

From the point of view of agriculture this custom of having very long and narrow villages is exceedingly uneconomical, because the cultivator has to walk such a tremendous distance to his fields, especially, as is often the case, when the *ábádi* is right at one end of the strip. There is in consequence a striking difference in rents for land near the *ábádi* in such villages as compared with those obtainable for land at the far end of the strip.

Málik kabza.

The origin of the inferior proprietary tenure, known as the *kabza málik*, is thus described by Colonel Cracroft :—

"From the conflicting circumstances brought to light, and consequent, as before stated, on Sikh over-assessment, Mr. Thornton bethought himself of an expedient for recognising the rights of the cultivator without introducing into the settlement records the anomalous holding of a cultivator paying no rent to the proprietor. He decided that in all cases in which the person recorded as cultivator at Summary Settlement paid no rent to the proprietor, he should, under the circumstances of his particular case as proved by judicial enquiry, be recorded either as proprietor of his holding, *málik kabza*, in which case he was to exercise all the rights of property, and pay only the Government demand or cesses, or as cultivator paying rent to the proprietor. The tenure is an anomalous one for the *málik kabza* does not share in the village responsibility and enjoys no share in the common land or profits. It was, however, the only way out of a great difficulty."

"The practice has been to record as *máliks kabza* only individual cases and small holdings ; wherever the holding was large and the class claiming proprietary right important, a share in the village common profits has been awarded."

Such proprietors are common in some parts of the district, and the status conferred on them seems to have been a very fair compromise between their claims and the objections of the other owners. These men paid no rent and were not, in fact, tenants in the ordinary acceptation of the term. They were often persons who had settled in the village in troublous times, or during the currency of Sikh contracts and had borne their share of the burden along with older proprietors, who were often only too glad to allow

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them to do so, and they were, therefore, clearly entitled to a higher status than that of a mere tenant.

In Tallagang Mr. Brandreth followed much the same course. Tenants who had acquired such prescriptive right that they could not fairly be made to pay a rent-rate were given the status of *málik kabza*. Mr. Brandreth wrote: "The *málik kabza* has often been called a copy-holder, but is really nearer the English free-holder, or owner of an estate tail, than anything else. The only limitation to his rights is the universal law of pre-emption; if he sells his land he must offer it first to the village owners. Latterly, he has sometimes been made to pay a small fee or seignorage due to the old owners, but this has not interfered with his rights of proprietor." The classes from whom the *kabza málikán* were drawn were chiefly members of the family of the original owners who had fallen into an inferior position, tenants of old standing who had become to all intents and purposes proprietors of the field, men who came into the village by gift or marriage, purchasers of particular fields, and those who were put in by the authorities of the time to manage the village during the dispossession of the real owners. The position of the *málik kabza* as described by Mr. Brandreth is this: he has full rights over the particular fields that he holds; but that is all; he "has no share in the rights and responsibilities of the village......he is not responsible for losses, and, therefore, he cannot claim a share in the reduction arising from increased cultivation; he has only to pay the sum fixed at settlement and has nothing to do with the village......There is this peculiarity that when the owners have no other means of meeting their losses, they can make their *málik kabza* a sharer and owner in the village, and call upon him to pay his share like the others."

If Mr. Brandreth intended that the *málik kabza* should be unaffected by alterations in the assessment of his village, his intentions have not been carried out. Except in a few cases where lump payments were distinctly ordered, the *málik kabza* pays the revenue assessable on his holding in the ordinary way, and, in addition, *málikána*, *i.e.*, a percentage on the land revenue taken by the full proprietors. The *málik kabza* now differs from the full owner only owing to the fact that he pays the *málikána* and that he has no share in the *shámilát*.

The opinion of Mr. Brandreth and Colonel Cracroft that the *málik kabza* has no share in the responsibilities of the village is now of doubtful validity. The *málik kabza* is, under the Land Revenue Act, a "landowner" and is liable under section 61. Even if it be held that he is an "inferior landowner," he is still,

Málik kabza —concld.

under proviso (*b*) and Rule 51, liable for the land revenue in the same way as any other owner. In Tallagang, the old *málikán kabza*, whose status dates from the first Regular Settlement, are of two kinds. The first class includes those whose *málikána* was fixed by separate orders of the nature of judicial decisions; the second and the largest class contains those who were not made liable to the payment by any order of this kind. The *málikána* of the latter arises from the circumstance that when Mr. Brandreth reduced his original assessment these men were given no share in the reduction, and at the next settlement the proportion between their payments and those of the full owners was maintained, the difference being then for the first time treated as *málikána* at so much per rupee of the land revenue. The *málikána* rate thus depends not on the history of the particular holding, but on the amount of the reduction, from the benefits of which the *málikán kabza* were excluded by Mr. Brandreth's orders.

In tahsíls other than Tallagang, it is not the custom for *málikán kabza* to pay *málikána* to the village proprietary. There the rates of *málikána* vary from $1\frac{9}{16}$ to $40\frac{9}{16}$ per cent., the lower limit being usually not much exceeded. In all tahsíls there is now, besides these old *málikán kabza* of Regular Settlement, a body of new *málikán kabza*, who have bought land without a share in the *shámilát* since Mr. Brandreth's time. They pay no *málikána* except in a few villages in Tallagang, where in the recent *bachh* proceedings they agreed to pay, at the customary rate in the tahsíl, one pice per rupee.

Wárisán kabza.

In some villages of Tallagang there is a variation of the *kabza málik* tenure, the proprietors being divided into three classes :—

(1) *Asl málikán* or *asl wárisán*, (2) *wásrisán kabza*, (3) *málikán-kabza*.

Their respective rights and liabilities are not everywhere the same; but in general the third class has, as usual, no share in the *shámilát*, the second takes a share therein calculated on its own holdings only, and the first takes a share calculated on the holdings of the *málikán kabza* as well as its own.

All these distinctions have lost their practical interest. Except for a casual reference to a *málik kabza* they are not even mentioned in Mr. Barry's Assessment Reports, or in the Final Settlement Report. A *málik kabza* has in modern practice some rights and duties as regards the land as any other owner. The distinction is that he has no share in the *shámilát*.

Cháhdárs.

Another unusual tenure which has fallen into desuetude is described as follows in the Gazetteer of 1907 :—

"In six villages in Tahsíl Attock, wells are to be found belonging to one person, but irrigating the lands of another. The owner

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Cháhdárs— *concld.*

of the well takes a water-rate (*ábiána*) from the owners of the land: the owner of the land is responsible only for the unirrigated rate fixed upon the land in the village distribution of revenue, the owner of the well being responsible for the water-rate. This is known as *cháhdár* tenure. The tenure is not and never has been recorded in the revenue papers, but the thing exists, especially in the villages round Hazro. The *cháhdár* is not himself a cultivator, but is a capitalist and usually a trader."

Size of holdings.

The Assessment Reports of the third Regular Settlement contained information as to the size of holdings, and gave a general average varying from 6 acres per holding in Sil Soan to 63 acres in Pindigheb. As admitted at the time such figures had no pretension to accuracy. Mr. Barry finds a decrease in the average size of the holdings in each circle. In the Attock Tahsíl he states that these decreases are more apparent than real, because in a good many cases owners have bought land in neighbouring villages and are shown twice over. For the remainder of the district, the following table shows the number of villages which fell into respective classes of cultivated area :—

Cultivated area in acres per owner or shareholder.	NUMBER OF VILLAGES.		
	Fatehjang.	Pindigheb.	Tallagang.
5 and under	68	9	7
6 to 10	35	36	26
11 to 20	18	39	33
21 to 50	30	22	13
Over 50	59	29	7

The value of the information is to indicate the pressure of population on the soil. The Chhachh area is heavily congested and the soil elsewhere bears a population approximately as heavy as it can support. In Tallagang there is some congestion, but this has been relieved by grants of land in the colony.

Tenants.

The tenants of the district fall into three classes—

(*a*) Occupancy tenants,

(*b*) *Mukarraridárs,*

(*c*) Tenants-at-will.

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Occupancy tenants.

The early history of the occupancy tenancy is described in the Gazetteer of 1907 as follows :—

"The occupancy tenants of the district have obtained their rights in various ways. Some obtained their status by assisting the proprietors to bear the burden of the Sikh assessments ; others obtained it as a compromise with the parties declared owners, the tenants agreeing to give up their claim to be declared proprietors of the village, which they despaired of proving, on condition of their being declared hereditary tenants. Many obtained it as a reward for giving evidence in favour of the successful party in a claim for proprietary rights.

The regulation of tenant right was effected mainly at Regular Settlement, in Tallagang by Mr. Brandreth, and in the other tahsíls by Colonel Cracroft. Colonel Cracroft's account of the action taken north of the Soan is of interest :—

Cases regarding the status of cultivators were contested with great warmth on either side. The cultivator tried to prove antiquity of tenure, the proprietor endeavoured to show that he, or his father, had located him, and had allowed him to remain on his lands, but that he was not, therefore, obliged so to continue him. The cultivator often pleaded that the proprietor had been in great straits, and had been rescued by the cultivating class, and that it was hard that he should be at the mercy of the proprietor in these good times, when in bad ones he would have made any sacrifice to retain him. He also claimed to have brought waste land under cultivation, to have improved it by manuring it, or raising embankments, to have erected hamlets, planted trees, and the like. Sometimes the claim advanced was that he was, in fact, an original proprietor. All these claims and pleas were gone into *seriatim*. The rule of limitation was ultimately applied with the greatest reserve in favour of the proprietor, and it was found that it satisfied him. At first a more detailed classification was attempted with a view not to injure the interests of the cultivating class. It was ruled, after consultation with the heads of subdivisions, that a cultivator who had brought waste land under cultivation, and had paid cash rates for 12 years or who had received cultivated land, paid cash rates, and had possession for 20 years, or who had received cultivated land, paid in grain, and held for 30 years, prior to settlement, should be recorded an hereditary cultivator. But at last the practice resolved itself into this, that 12 years' clear occupancy prior to British rule, *i.e.*, A.D. 1848-49, should, under any circumstances, constitute a title to an hereditary cultivating tenure. It was asked of the proprietor

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Occupancy tenants—*contd.*

himself, as suggested by Mr. Thornton, whether he considered he would, could or would not or could not oust a cultivator; in a great many cases he declared he would not; such a case was entered on what is called the *mudákhilat* paper, or statement of the rights and liabilities of cultivators, and considered at an end, unless either party subsequently came into court, endeavouring to show that his statement was incorrect, and that he had proof to substantiate his claim against that statement. The fact is that there is some difference in the tenures of the cultivating class in the eastern and western parts of the district. The cases in the former were first adjudicated. The preponderance of the Sikh power had rendered the position of the cultivator more secure, and such a burden had been imposed that, though theoretically the proprietor had the power of ousting the cultivator, practically he had never the will; while in the western part the revenue was lighter, the proprietor more powerful, and the Government weaker." Since the above remarks were written the Punjab Land Tenancy Act of 1887 has come into force.

Mr. Brandreth's action in Tahsíl Tallagang is thus described in the Jhelum Gazetteer :—

"The regulation of tenant right in this district was mainly effected by Mr. Arthur Brandreth at the first Regular Settlement. During the Summary Settlements some tenants paid rents in kind; but the great majority paid in cash at the Government revenue rate and no more. They were thus on a practical equality with those whom we now recognise as owners. This equality was the natural outgrowth of the Sikh system, which generally refused to recognise any privileged status between the Government and the cultivator. Mr. Brandreth put an end to this state of matters. In every village he first defined and set apart those whom he considered to be owners. All other cultivators were distributed among four classes of tenants, of which the first three were granted rights of occupancy, and the last were the tenants-at-will."

These classes were as under, *viz.* :—

I.—Ancient tenants, *asámi kadímí*, being those who had come in before the great famine of 1783.

II.—Old tenants, *mustakil purána*, who had been in possession about 50 years on the average (say, from 1810 A.D.).

III.—New tenants, *mustakil naya* or *jadíd*, who came in after 1810, but were considered to have a claim to rights of occupancy.

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All the above classes were granted rights of occupancy, or, to use the language of the district, were made *mustakil* : the fourth class comprised all the tenants-at-will or *ghair-mustakil*. This system of classification only developed itself after the Settlement had been some time in progress; it was, therefore, never applied in Tahsíl Jhelum, where only the broad distinction of *mustakil* or *ghair-mustakil* was recorded. In the other three tahsils, however, it was generally enforced, but many modifications were allowed in individual cases, especially in the matter of rent, for the question of rents was also regulated by Mr. Brandreth. Rents in kind were recognised and maintained whenever it was possible to do so, and cash rents were regulated as follows:—

The ancient tenants of the first class were charged the revenue rates and cesses with a small additional sum for *malba*. The old *mustakil* tenants or second class paid the revenue rates and cesses, together with a *málikána* of from two to four annas on each rupee of revenue. The third class or new *mustakil* tenants paid the same as the second class, except that in their case the *málikána* was put at from four to eight annas. In actually assessing the *málikána* the theoretical scheme was often a good deal modified. The cash rent of tenants without rights of occupancy could not of course be fixed, but the rate then existing was duly set down, and in practice it has not been very often since departed from. Such cash rents are, however, very rare. Mr. Brandreth intended that these rents should be recorded in the gross result merely, without details of the calculation by which it was reached; and it was further proposed that these gross rentals should be modified periodically in accordance with the price of corn. This part of the scheme has always been a dead letter; it was impossible to keep secret the details of the calculation, and in practice all the parties concerned have paid attention to nothing but these. No one has ever wished or attempted to have his rent re-valued upon a corn standard, and so it has come about that all tenants pay rentals in kind, or rentals in cash equal to the sum assessed upon the land with cesses and with or without a *málikána* or *malba* surcharge of various amount.

In the record of the subsequent settlements all these rentals have been carefully maintained in their old proportions. They all take the form either of rental in kind, or of a payment of a *málikána* in cash in addition to the revenue and cesses now assessed upon the land, but the old classification of occupancy tenants has not been followed: it has no connection with the Punjab Tenancy Act, and is, therefore, practically obsolete: in

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the new record all tenants with rights of occupancy have been recorded as holding under either section 5 or section 6 of the Tenancy Act, and no further discrimination has been attempted. The practical result is that the most part of the old *asámis kadímí* with a few others have been placed under section 5; and the rest under section 6.

The status of occupancy tenants is not very clearly understood in the district. Everywhere they pay the same rents as tenants-at-will. Where the owners are strong the tenants are weak, and their rights are correspondingly contracted.

In the Chhachh, occupancy tenants pay cash rents almost without exception and are a satisfactory and prosperous body. In the Sarwála and Nála circles they are quite indistinguishable from the tenants-at-will. Here and there in these two circles, especially in the Nála, true occupancy tenants are found, tenants, that is, who have a status radically different from that of tenants-at-will. There they are the outcome of disputes as to ownership at one of the Summary or Regular Settlements. In such cases the knot was often cut by giving one of the claimants occupancy rights with the burden of the land revenue and a small *málikána*. Elsewhere, occupancy tenants seem to have been invented mainly for the purpose of preventing the proprietors from worrying over being proprietors. They pay the same rents as tenants-at-will and are subject to similar liabilities; and, except when some agitation arises, are treated by their landlords with the same liberality or severity. In the Sarwála circle especially, occupancy tenants also cultivate large areas as tenants-at-will under the same landlords, and this of course prevents them from emphasising their occupancy rights. They are, however, a weak spot in the agricultural economy. Even now, in villages along the Hassan Abdál and Abbottabad road, the proprietors complain loudly that their occupancy tenants have deserted their holdings to drive bullock carts up and down to Abbottabad, and escape ejection by throwing down on their land *tárámíra* or some such worthless crop, from which the landlord gets but little advantage. The same difficulty is making itself felt round Campbellpur, where the occupancy tenants tend to drift into the Cantonment, and it is significant that in the two neighbouring villages of Bariar and Shakardarra, which are owned by a single proprietor, the landlord has only got the full value out of the land by ousting, by fair means or otherwise, practically all his occupancy tenants. The difficulty is not indeed likely to diminish, but at present so little is the difference between the two classes of tenants recognised by the people that, in all the discussions about *khángi-paimásh*,

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the landlords have never thought of pressing their claims against the two classes separately."

Khángi-paimáish.

"The practice of *khángi-paimáish*, or private measurement, is perhaps peculiar to the Attock Tahsíl. It dates from a time when tenants were hard to get, and applies to cash rented land only. It is accordingly found as a rule only in the Chhachh. The idea was that the tenant received a reduction on his proper rent, and this was managed by his being allowed to treat the *kanál* (⅛ of an acre) as consisting of only 16 or 17 instead of 20 *marlas*. By the time of the revised settlement this rebate had begun to break down, but it was recorded in the papers of several villages. At the current settlement it was found to exist only in a very few estates. In some of these, where harmony reigned, the parties agreed to express their rents in terms of the Government measure. In others, in which discord prevailed, the old entry has been retained. In some villages, as in Burhán in the Nála Circle, the dispute is purely verbal. It applies only to the well irrigated land, and each party knows to a pice what rent is due on the well and no measurement ever takes place at all. But as the rate recorded is a rate on a measure of area subject to the deduction under discussion, parties, who are on bad terms, delight to wrangle over the point. As a matter of fact, the sums actually paid correspond neither with the amount brought out by the Government, nor with that by the reduced standard, and are, in essentials, rents in gross on the various tenancies. As, however, neither party will agree to recording them as such for fear of losing a handy bone of contention, the old entries have been maintained, but the total amounts due have been added. It was in this village especially that it was noticed that the landlords never realised that their claim to have the entries altered could be made with greater effect against the tenants-at-will than against the occupancy tenants."

In these matters times have not changed materially.

Since 1907 occupancy tenants, it is true generally, have come to appreciate adequately their rights and duties under the Act.

Throughout the district occupancy tenancies, other than *mukarraridári*, almost invariably fall under section 6. In the Chhachh they comprise 32 per cent. of the cultivated area, and on 26 per cent. out of this 32 per cent. they pay cash rents. These rents were probably full economic rents at the time they were originally fixed, but prices have risen since then by about 100 per cent. which has made them very light. In the large majority of cases they are the same now as they were when Major Cracroft first fixed them, except that in a number of villages, where the owners have been strong, certain customary deductions, which

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used to be made for failed areas and areas left unsown, have now been abolished. In the Sarwála Circle 28 per cent. of the cultivated area is held by occupancy tenants, of whom 20 per cent. pay at *batái* rates and 8 per cent. cash rates. The cash rents are generally those near the Chhachh. In the Nála circle 34 per cent. is now cultivated by occupancy tenants. On 27 per cent. of this 34 per cent. *batai* rents are paid. The rates vary considerably from one-fourth in the sandy north-west corner to one-half on the better land near the village and on the *nahri*. In Fatehjang in the Nála Circle, 36 per cent. is cultivated by occupancy tenants, the general rate of rents being the same as that paid by tenants-at-will. In the Gheb 21 per cent. is cultivated by occupancy tenants and here again they nearly all pay *batai*. In the Soan Circle, only 5 per cent. is held by occupancy tenants and on 3 per cent. they pay rents in terms of the land revenue with or without *málikána*. In Pindigheb in the Jandál Circle 8 per cent., in the Makhad and in the Sil 20 per cent. is cultivated by occupancy tenants. About ⅘th of them pay *batái* rents, which are usually at the same rates as those paid by tenants-at-will. In Tallagang 10½ per cent. of the cultivated area is held by occupancy tenants of whom rather more than half pay at revenue rates with *málikána*, which is usually only an anna or two or even less per rupee of the land revenue. The remainder pay *batái* rates which are usually the same as that paid by tenants-at-will.

Mukarraridars.

In the course of Settlement operations it became necessary to settle for ever what was in 1907 the vexed problem of the status of the Mukarraridar. This kind of tenancy arises out of a contract between landlord and tenant whereby the former agrees to accept and the latter to pay a fixed rent in perpetuity for certain land, usually on condition that a well is sunk. It is described by Mr. Barry as follows :—

The *mukarraridári* tenure is peculiar to the Attock District. In the Attock Tahsíl the Mukarraridár in almost all cases obtained his rights by sinking a well. The position will be made clearer by taking a couple of typical instances—

(*i*) *A* is a Maliar, who by industry and thrift has saved up some money and wishes to secure some permanent rights in the land; or he is an Awán tenant-at-will who has been on service. B is a land-owner with plenty of land, but, owing to his extravagant habits or lack of enterprise, he is unable or unwilling to sink a well himself. An agreement is struck between the two with the following conditions:

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A sinks a well entirely at his own expense and is responsible for its upkeep and all the cost of cultivation. He also pays *B* a lump sum down, or "*pagri*," of Rs. 150, and binds himself to pay rent for ever after at the rate of Rs. 16 per acre as soon as the land becomes irrigated. This class of case is very common in the Sarwála Circle, especially in the villages near Campbellpur. *A* benefits by getting a permanent interest in the land, which he never had before, and a good investment for his money. *B* gets a largely increased rent and also gets the benefit of the protective lease allowed by Government on the well.

(*ii*) *A* is a money-lender who has got *B*, a small landowner, into his clutches. *A* suffers from the greed common to his class, but is prevented by the Alienation Act from obtaining possession of *B.'s* land. They come to an agreement. *A* sinks the well and obtains *mukarraridári* rights. He pays *B* a fixed rent which is usually much smaller than in (*i*). Frequently it is not more than Rs. 8 per acre. The "*pagri*" he pays is probably large and may amount to from Rs. 600 to Rs. 800, but it is really a debt of doubtful value consisting largely of accumulated interest. These cases are not uncommon in the villages round Hazro, where holdings are small and money-lenders numerous and rapacious. The amount of the "*pagri*" paid is nearly always concealed, and it is not always easy to obtain the sanction of the Collector required by the Land Alienation Act. The amount of the "*pagri*" paid varies very considerably, as also do the rents agreed upon. Thus in Akhori, an average village in the west of the Nála Circle, a Hindu in 1912 paid Rs. 200 for *mukarraridári* rights in about 8 kanals of land, the rent being fixed at Rs. 24 per acre per annum. In addition to this, he had to construct a *jhalár*, which was expensive. Early this year he bought *mukarraridári* rights in 11 kanals, 11 marlas more land on the same *jhalár* for a further sum of Rs. 400, agreeing to pay Rs. 32 per acre rent. In the same village a Maliár recently obtained *mukarraridári* rights in 21 kanals by constructing a *jhalár* which cost about Rs. 1,200 to Rs. 1,500 and he now pays a rent of Rs. 32 per

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acre. These rates, however, are above the average. A great many new Mukarraridars have come into existence by sinking wells near Campbellpur. There the usual rate of rent fixed is about Rs. 20 per acre. *Pagris* vary.

In the Nála Circle Mukarraridars are less common. Where they exist they are usually old tenants-at-will, *tarkháns*, *náis*, *mochis*, *maliárs*, *awáns*, etc., and are hardworking and good cultivators.

Legal position of Mukarraridár.

The exact legal position of the Mukarraridár has always been a difficulty. His status is superior to that of an occupancy tenant under section 5 or 6 of the Tenancy Act because he has the power to alienate his rights without consulting the owner, and when he dies the rule of succession in regard to them is the same as in the case of proprietary rights. Whether his rent could be enhanced or not, and, if so, to what extent, was a very debateable point. The matter was referred to the Financial Commissioner, who decided that a Mukarraridár is really an occupancy tenant under section 8 of the Punjab Tenancy Act who, by virtue of a special agreement, either expressed or implied, is exempt from the provisions of Chapter V of the Tenancy Act, such agreement not being barred by the provisions of section 110. It was recognized before that, even though the Mukarraridár had agreed to pay a certain fixed rent for all time, the rate agreed upon could be modified in the event of a change in the land revenue assessment by a regular suit under section 34. The Financial Commissioner has now held that such rents can also be adjusted under section 27 of the Act.* Mr. King's decision was summed up in the following words:—" A Mukarraridár is a tenant under section 8 of the Punjab Tenancy Act, enjoying in most cases special privileges under the agreement which created the tenancy. Such special privileges are ordinarily connoted by the term ' Mukarraridár ' and commonly include—

(*a*) a right to alienate his rights in the land without the permission of the landlord ;

(*b*) a right of descent similar to that possessed by all landowners unrestricted by the provisions of section 59 ; and sometimes

(*c*) a protection from enhancement to the full amount permitted by section 22, but not an exemption from adjustment under section 27."

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*Financial Commissioner's office letter No. 16611, dated 13th December 1924.

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Legal position of Mukarraridár—concld.

But this decision did not in itself suffice to settle the two problems which remained, *viz.*, how to burden the Mukarraridár with his proper share of the increased land revenue, and, secondly, how to adjust rents equitably without driving the parties to litigation. It was to meet these two difficulties that a special Punjab Land Revenue Amendment Act, 1925, was passed, by virtue of which the Settlement Officer adjusted slightly over 20,000 cases. These came from villages of —

Tahsíl Attock	..	..	..	168
Tahsíl Fatehjang	..	..	..	13
Tahsíl Pindigheb	..	..	..	12
Tahsíl Tallagang	..	..	..	1

This wearisome task was meticulously completed by the Settlement Officer himself.

Tenants-at-will.

As for tenants-at-will, the most interesting cash rents are those paid on *cháhi* lands in the Chhachh. These show an almost perplexing variety varying from Rs. 5 to Rs. 180 per acre, and even more. Sometimes the well rope and pots are provided by the owner, sometimes by the tenant. It is extremely difficult to disentangle true economic rates from rents on favoured rates. Good tenants are not easy to come by, and the normal owner prefers to keep a good tenant at a lower rent, rather than bother to find a possibly worse substitute who will pay a higher share.

Hindu owners tend to work their tenant more hardly, and will exact a half where the recorded rent is one-third, binding the tenant to the land by whatever screw can be put upon him.

Landlord and tenant.

To a strong owner occupancy tenants paying kind rents are always a source of strength, not a weakness. They provide him with the nucleus of a tenantry who have too much to lose to run away, for in most villages the occupancy tenants are also tenants-at-will. Throughout the district a feudal feeling is strongly ingrained, and, provided that the proprietor does not unduly oppress his tenant, he will receive from him both many services other than those enforceable at law and also the respect due to this position. The Sardār of Kot Fateh Khan has done everything a model landlord could do to assist and encourage his tenantry. He has lent money free of interest to their co-operative banks. He has provided them with a hospital and a school. In times of poor harvests he is very generous in the provisions of seed. Only with the non-agriculturist tenants, some of whom from time to time have objected to payment of the customary manorial dues, has there been trouble ; but the estate has been successful in litigation. Provided a tenant acknowledges the rights of the proprietor, the proprietor invariably treats him

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Landlord and tenants —concld.

generously. It is only when the tenant or a *kamín* endeavours to assert an aggressive independence that trouble arises. A large proprietor will make small rent-free grants to *faqírs* or *mullas* or to the widows or the fatherless, and in every way the owner manages the affairs of his people down to the smallest detail. This at least is the standard set by the Mughals of the Pindigheb circle and the Jodhrás of the Sil. The relations of Khattar landlords with their tenants are not always so good, and the peasantry of at least one big Awán proprietor in the Attock Tahsíl are apt to be restive.

Of the Hindu money-lender Mr. Kitchin wrote that he is the most grasping and unreasonable of all owners. To him agriculture is a department of business: to the *zamíndár* it is honourable work. The Hindu will not cease till he has found the tenant who will both get the most out of the land and give him the greatest share of the product. It must often be hard on the tenant: but undoubtedly the Hindus' holdings are the best cultivated.

Revenue History up to the Current Settlement.

Tahsíl Attock during Sikh Rule.

Up to the second Regular Settlement the tahsíl of Attock was composed of five fiscal sub-divisions, namely, Haveli, Sarkáni, Nála, Sarwála and Haro, the last for convenience being divided into two circles. Haveli and Sarkáni included the Chhachh villages. Sarwála lay south of these two and extended to the tahsíl boundary on the south, and from the Indus to the Khermár hill east and west. The rest of the tahsil fell into the other two *iláqas*, Burhán and the Khattar villages round Kot Sundki being in Nála and Hasan Abdál, Wah and the villages east in the Haro *iláqa*. No fiscal history of these *iláqas* has been obtained prior to A. D. 1813. From this date to A. D. 1832, the Sikhs collected the rents by appraisement of crop. In A. D. 1833 Bhái Mahn Singh was appointed *kárdár*, and assessed the whole of Khattar containing the three last of the five *iláqas* above named. He resumed the *chahárams* of the Tarkhelis, in abiding the mountain of Gandgarh, and thus gave the final stroke to their entire dispossession from the *iláqa* of Haro. He kept on better terms with the Khattars, and allowed them a *chaháram* out of the revenue. His assessment was succeeded by that of Misar Rám Kishen, which lasted until 1841. Diwán Sukh Ráj again assessed in 1842, and his leases lasted until 1846, and, lastly, Bhái Mahn Singh again returned and gave fresh leases in the year of the Regency.

The fiscal history of the *iláqas* of Haveli and Sarkáni, composing the celebrated and fertile valley of Chhachh, inhabited by

Patháns who located themselves there, driving out the Dilázáks during some of the inroads of the Pathán invaders, is pretty well known since A. D. 1813, when the Sikh power was fully established. Leased at first for about seven years to Chaudhri Mazulla of Musa Kudlathi, who collected the rents by appraisement of the standing crop, for Rs. 24,000, it was afterwards managed by successive *kardárs* passing through the hands of the well-known Sheikh Imam-ud-Din. They all collected by appraisement of the crop until A.D. 1835, when Bhái Surjan Singh and Báki Rái were appointed *kárdárs*. They fixed moderate assessments which remained in force for eight years. They were succeeded by Diwán Sukh Ráj who revised the assessments. These lasted until A. D. 1846, and in 1847 the Regency assessments were given out by Mr. Vans Agnew and Bhái Surjan Singh. A synopsis of these assessments is shown in the margin.

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Iláqa.		1838-42.	1843-44.	1847.
Chhachh	Haveli ..	27,349	27,658	38,686
	Sarkáni ..	41,245	44,836	53,097

The system followed seems to have been comparable with that adopted by Imperial Rome and also by Turkey before the War. There was a certain share of the gross crop which was the right of Government. That share was collected in kind after appraisement by a contractor, who contracted with the Government of the day for a fixed sum. Accordingly it is rare to find, in this tract, and at this period, records of cultivators, or proprietors as we now call them, who paid revenue direct to the State.

The assessments of 1847 were revised two years later by Lieutenant (later General) John Nicholson who seems to have based his estimates on the papers of the Sikh agents. Both his assessment and those of the Sikhs seem to have been severe. The second and third Summary Settlements were carried out by Mr. Carnac in 1851 and 1853, respectively, and involved a reduction of nearly 30,000 rupees in the assessment. Both of his settlements are said to have worked very well.

Attock Tahsil. First Regular Settlement.

The first Regular Settlement was carried out by Major Cracroft about 1857 to 1864 : and he effected a still further slight reduction in the assessment. Major Cracroft took the five old Sikh *iláqas* as his assessment circles. The land he divided up into classes very similar to those adopted at last settlement, and he then worked out rates for each class of land. These rates seem to have been calculated largely on the basis of inquiry from *zamindárs* and others as to how they divided up the assessment over the different kinds of land. The *jamás* given by these rates were used as a

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standard of comparison: and various other facts, such as the tenure of the village, the tribe of the proprietors and cultivators, the population and cattle statistics, etc., were considered. The assessment seems to have been carried out with great care and the settlement, like those of Mr. Carnac, worked extremely well.

Second Regular Settlement.

The second Regular Settlement was carried out by Mr. Steedman in about 1880-84. He replaced the five Sikh *iláqas* by the three assessment circles still in existence. He also made a few minor modifications in Major Cracroft's classification of land, chiefly in the direction of sub-division of classes. His method of working out the assessment was very much on the lines of the instructions now in force in the Settlement Manual. He made a careful inquiry into prices and yields and worked out a produce estimate based on *batai* rents from them. His assessment for the whole tahsil worked out at about Rs. 30,000 higher than Major Cracroft's. The incidence per acre of cultivation was actually lower than at the previous settlements. The chief differences between his assessment and that of the first Regular Settlement were in regard to rates. Mr. Steedman reduced Major Cracroft's rates for irrigated land in the Chhachh and Nála. For *lipára* Major Cracroft had rates varying from Re. 1-8-0 to Rs. 2-0-0 per acre. His successor fixed a rate of Re. 1-8-0 for all three circles. Major Cracroft divided the other unirrigated land into two classes, namely, *maira* I and *maira* II, his rates for the former being usually double those for the latter. Mr. Steedman introduced the new class of *las*. He had only one class of *maira*, but had a separate class for *rakkar*. Thus in the Chhachh, Major Cracroft's rates for *maira* I and *maira* II were Re. 0-12-0 and Re. 0-6-0 per acre, respectively. Mr. Steedman fixed the following:—*Las*, Rs. 2-0-0, *maira*, Re. 0-12-0, *rakkar* Re. 0-4-0. Again in the Sarwála Major Cracroft's rates were—*maira* I, Re. 0-8-0, *maira* II, Re. 0-4-0. Mr. Steedman fixed an all-round rate of Re. 0-5-0 for *maira* and *rakkar* in this circle. Mr. Steedman's settlement seems to have been carried out with grea thoroughness and care, and his report displayed a very intimate knowledge of the tract, but his health broke down before he could complete it, with the result that the *bachh* was not well done. The settlement was probably lighter than any of the preceding ones, and the rise in prices which took place during the next 20 years made it lighter still.

Third Regular Settlement.

The third Regular Settlement was carried out by Mr. (now Sir Montagu) Butler, Assistant Settlement Officer, in 1901-04. On October 1st, 1900, the Attock Tahsíl was transferred to the Hazára District, and though it was retransferred on November 1st, 1901, on the formation of the North-West Frontier Province,

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both the preliminary Assessment Report and the main Assessment Report were submitted through Mr. Watson, the Settlement Officer of the Hazára District. The Final Settlement Report, however, was written by Mr. Kitchin, Settlement Officer of Ráwalpindi, or, rather, he incorporated in a general report on the whole district a final settlement report which had been written by Mr. Butler.

The following statement shows the assessment at the different settlements mentioned above :—

Settlement.	Approximate year.	Amount.
		Rs.
Regency	1847	1,53,729
Sikh Settlements	1840	1,36,570
	1843	1,38,341
Lieutenant John Nicholson (1st Summary)	1849	1,59,197
Mr. Carnac's (2nd Summary)	1851	1,38,255
Mr. Carnac's (3rd Summary)	1853	1,30,622
Major Cracroft's (1st Regular)	1857-64	1,29,050
Mr. Steedman's (2nd Regular)	1880-84	1,59,290
Mr. Butler's (3rd Regular)	1901-04	2,04,251
Mr. Barry's (4th Regular)	1923-27	2,81,092 reduced in 1929 to 2,04,083

Tahsíl Fatehjang under the Sikhs.

Fatehjang under the Sikhs was composed of the *iláqas* of Nála (part of the old Sikh *iláqa* of which a portion has been incorporated with Tahsíl Attock), Fatehjang, Asgám, Soán and Kot. The fiscal history of Kot will follow in the account of Pindigheb. The history of Asgám and Soán is that of Ráwalpindi. These *iláqas* were directly managed by the Sikhs, the rates being enhanced as the Sikh power increased. The system was as usual *kankút.* In 1830 A.D. Mahárája Ranjit Singh, hearing of the grievous exactions of his officials, and of the unsatisfactory state of affairs, sent General Ventura to assess these and other tracts. His assessments were fair and even light, but following on a period of much depression and over-taxation it was with difficulty they were realised. In addition, the agents who had to carry out these fiscal measures were rapacious and exacting, and gave the lessees no chance.

Warned at last of increasing disaffection, Mahárája Ranjít Singh summoned the heads of tribes and villages to Lahore, treated them with hospitality and distinction, fixed comparatively light assessments, and sent them back to their homes, assured that

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what they had suffered was not at his hands, but was the work of his officials. He conferred on them a still greater benefit than even the light assessments, for he sent to realise them Bhái Dul Singh, a man of known integrity of character and amiable temper, whose name was long remembered as a just and faithful steward. Dul Singh administered these *iláqas* for two years, and was succeeded in A.D. 1804 by Diwan Kishankaur of Siálkot, whose incumbency lasted until 1840. He raised the revenue and overtaxed the people. The land was visited, during his rule, by swarms of locusts so vast as almost to cause a depopulation of the country. They remained three seasons, namely, from Kharif Sambat 1900 = A. D. 1843, to Sambat 1901 = A. D. 1844.

Nevertheless, the Government Agent showed no consideration, and although the *zamíndárs* had no crops, he realised the revenue to the last farthing. Chiefly from this period dates the indebtedness of the proprietors to the trading class, which has reaped a rich harvest from their misfortunes; and to this time principally must be referred that complication in the tenures and transfer of proprietary rights to the cultivating class, which have entailed so much hardship on the proprietary body, and loaded our courts with so large an amount of litigation. Unable to realise the demand even under these circumstances, the Government Agent often introduced cultivators of his own, gave them a fixed terminable lease and virtually admitted them to a title to the proprietorship of the holding. In short, the cultivating class had to put its shoulder to the wheel, and help the proprietor out of his difficulties, or the latter would have been entirely dispossessed. Diwan Kishankaur was succeeded by the same Bhai Dul Singh who had preceded him; he again reduced the demand to something more resembling the figure at which it stood before Kishankaur's incumbency.

The *darbár* papers and other sources show the Sikh assessment for these *iláqas* to have been as follows:—

Names of *Iláqa*.	Names and Jama of successive Sikh Kardars.		
	Dul Singh, 1833-1839.	Kishankaur, 1840-1846.	Dul Singh, 1847.
	Rs.	Rs.	Rs.
Asgám	24,824	30,289	27,074
Soán	46,148	48,296	46,974

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Tahsil Pindigheb under the Sikhs.

The Tahsíl of Pindigheb was composed of the *iláqas* of Sil, Khunda, Jandal and Makhad. The Sikhs were longer in taking the management of this comparatively unprofitable tract, inhabited by the hardiest races the district contains, than any other portion of it. They at first farmed the three first *iláqas*, together with other tracts of the Jhelum district, for the annual sum of Rs. 6,900 to an ancestor of the Máliks of Pindígheb, Malik Amanat, who collected the rent by appraisement of the crop. He was followed in *iláqa* Sil by his son Malik Nawáb, and in *iláqas* Kot and Kunda by Rái Jalal, ancestor of Sardár Fateh Khan Gheba, of Kot, who also collected the rents by appraisement of the crop. Malik Nawáb rebelled and died in exile, and enhanced leases were given to Malik Ghulam Muhammad, grandfather of the present Maliks of Pindigheb, Aulia Khan and Fateh Khan, and to Rái Muhammad Khan, father of Sardár Fateh Khan Gheba. They also appraised the crop. An interval of two years intervened when Jodh Singh, Kárdár, collected by appraisement and the revenue was then farmed by Maháraja Ranjít Singh to Sardár Dhanna Singh Malwái, who, utterly unable to cope with these sturdy *zamíndárs*, sublet the lease again to Malik Ghulam Muhammad and Rái Muhammad Khan. But the Malik and the Rai failing to fulfil their contract were summoned to Lahore. Some altercation ensued as they were leaving the Maháraja's Darbár, during which Rái Muhammad Khan cut down Malik Ghulam Muhammad and fled. His offence was condoned and a fine imposed. In A. D. 1833, these *iláqas* were given to Sirdar Attar Singh Kálawála. He collected with difficulty by appraisement of crop. In 1834, his agent, Sultan, was killed by the Khunda Ghebas. Cash assessments were fixed in supersession of the appraisement system, which was not found to answer; but these did not fare much better. The *iláqas* were then given to *Kanwar* Nau Nihál Singh, grandson of Ranjít Singh. The rates at which his agents collected are said to have been very heavy, and realised with difficulty.

The tract was again given to Sirdár Attar Singh, Kálawála, who this time was determined to get rid of one of the most troublesome of the subjects of the Maháraja. He invited Rái Muhammad Khan, loaded him with presents and honours, and immediately left for Pesháwar. On his return six months after, he invited the Rái to the Fort of Pagh, situated about a mile from his hereditary seat, Kot. With the recollection of his former reception fresh in his memory, Rái Muhammad Khan would not listen to the advice of his retainers and friends to take an escort, but went to the Sardár with only a couple of followers. Scarcely had he set foot inside the fort, when he was attacked by Budha

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Tahsil Pindigheb under the Sikhs—*contd.*

Khan Mallál and others, and cut down. Sardár Fateh Khan, his son, lived to avenge this treacherous murder by the wholesale slaughter of Budha Khan's family, leaving only the latter and a young nephew, who are still alive, and are, as may be supposed, the bitter enemies of the Sardár. In 1845 the *iláqas* were given in farm to Malik Fateh Khan, Tiwána, of Shahpur. He managed them for one year, partly on the appraisement system and partly on cash leases. In 1846 Misar Amin Chand appraised the spring and Diwán Rájrúp the autumn crop, and in 1847 the revenue was collected in cash.

The fiscal arrangements of this tahsíl were involved in inextricable confusion, the collection of the revenue was generally a skrimmage, and therefore it is almost useless to found an argument on cash leases which were never acted on. Still, as the information has, as far as possible, been collected, it is given below *quantum valeat* :—

Tahsíl.	*Iláqa.*	1838.	1839—41.	1842—44.	1845.	1846-47.
Fateh Jang ..	Kot ..	20,168	20,179	20,167	19,896	19,859
Pindigheb ..	Sil ..	..	..	45,012	45,774	40,594
Do. ..	Khunda ..	..	..	5,337	3,883	4,780

The distinctive feature of *iláqas* Pindigheb and Fatehjang is their *chaháram* tenures. Whether the Sikhs collected by appraisement of crop or by fixed leases (which it has been seen were seldom if ever acted up to), they deducted a *chaháram* or fourth part of the receipts in favour of the proprietors. The families who enjoyed this proprietary profit were the Jodhrás of Sil, the Ghebás of Bálagheb, the Mughals of Khor, and a Pathán chief of Makhad, and also some Khattars in Khattar.

The *iláqa* of Jandál, though for geographical reasons it now forms part of Tahsíl Pindígheb, used formerly to be in the Sikh sub-division called Khattar; it is inhabited by Khattars. Its fiscal history is, therefore, much the same as that of the other *iláqas* of Khattar, namely, Sarwála, Nála, Haro and Fatehjang. Bhai Mahn Singh framed the first assessments, but it is very uncertain how far they were acted on. The only difference is that it was held in *jágir* by Sardár Nihál Singh, who is said to have collected the rent by appraisement of crop; yet there are leases extent. He was succeeded by Malik Fateh Khan,

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Tiwána, in 1845. The Malik was followed by Diwán Rájrup. The management is stated to have been by appraisement. In 1847 a cash assessment was attempted, but was not realised in full. It was always a troublesome tract. The collected statistics, shown in the margin, are under the circumstances given with diffidence at what they are worth. *Iláqa* Makhad is situated at the extreme south-western point of the district. The *iláqa* contained two parts, five villages, the *jágirs* of the Mattu Sirdárs, and seven villages Makhad (proper), inhabited by the Sagri Patháns, of whom Sardár Ghulam Muhammad Khan was the chief. The township of Makhad was always held by the Sikhs under direct management. It was a considerable trading mart. The remaining villages paid a very light assessment. The general result is as follows :—

Iláqa.	Sirdár Mahn Singh.	Fateh Khan, Tiwána.	Rájrúp, etc.
Jandál ..	48,070	40,025	44,312

Iláqa.	Detail of villages.	1842 to 1847.
Makhad	Five villages of an old *iláqa* called Jabbi being part of the Mattu jágir.	2,941
Do.	Makhad proper, seven villages	2,173

Tallagang under the Sikhs.

Mr. Brandreth thus describes the system under which the Sikhs assessed and collected their land revenue in Tallagang :—

"In the Sikh time the cultivators usually paid by what was called the *bigha* rate ; the *kárdár* and the appraisers of the crops would select a fair field and very fairly calculate the produce by the eye ; a deduction of one-tenth would be made for the village servants, and half the rest taken as the Government share. The field would then be roughly measured by a man's paces, or the area guessed, they can do this with unusual accuracy ; the produce per *bigha* of this field was thus calculated as an average *bigha* ; the *kárdár* would afterwards visit each field of each owner, examine the standing crops and assess it as equal to so many average *bighas*. It was here that the owners gained ; they were, it is true, allowed nothing from their cultivators except where they were a very powerful body, and had to be conciliated, but their headman accompanied the *kárdár*, and by assessing the cultivators

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highly, induced the *kárdár* to treat their own fields with considerable leniency : of course, a system like this gave enormous opportunities for fraud and favouritism.

"The number of *bighas* agreed upon was entered against each man, and as soon as the price of grain for the harvest was fixed, the value was calculated. And the village money-lender had to advance the whole, or a large portion, of the amount to the *kárdár*. The *kárdár* then aided him in collecting the corn from the tenants. When the villagers obtained a fixed contract they followed the same system, only modifying it by fixing the number of average *bighas* each man's land was equal to, and then dividing the sum due by this number, and consequently when they came to make a permanent division they assessed the different sorts of soil as equal to so many *bighas* at the worst soil, and divided the revenue accordingly."

There is very little trustworthy evidence as to the amount of the land revenue under the Sikhs. The *kárdárs* took as much as they could get. The professed standard of taxation in Tallagang was one-third of the gross produce. Mr. Brandreth calculated the Sikh demand for Tallagang at Rs. 99,698.

The Summary Settlements.

In Tallagang the first Summary Settlement was made immediately after the second Sikh War by Mr. Bowring, and was somewhat severe. The standard of assessment was two-fifths produce or the Sikh demand, whichever might be lowest. The second Summary Settlement of 1852, by Major Browne, was intended to correct the more obvious inequalities of the first. These Summary Settlements on the whole worked fairly well. The assessments were easily paid. In two or three estates only did the owners refuse the assessment, and relinquished their proprietary rights. In the rest of the district the first Summary Settlement was made by Lieutenant John Nicholson, assistant to the Board of Regency. He increased on the Sikh assessments, and even in some cases on those of Diwán Kishankaur, and others of the most exacting Sikh officials. His *jamás* were considered very oppressive. He had framed them entirely on the estimates and papers of bygone Sikh agents, whose collections are now known to have been far beyond the amount the agricultural community could bear in a term of years. Other circumstances concurred to render these leases oppressive. The people were deeply in debt ; they had not recovered from the destructive visitation of the locusts ; and far more serious than even these causes was one which made the load intolerable. An unparalleled fall of prices took place at the period of annexation, for which it is difficult to account. Although

large cantonments were formed and the consumption of grain must have been greater than during Sikh rule, yet the amount of grain stored was probably immense, and a certain confidence may have taken possession of the trading classes, tending to make them disgorge their hoards. All these causes combined, plunged the agricultural body into great distress. Added to this was the absence of employment, caused by the disbandment and discharge of the Sikh myrmidons, and the want of ready money. It is not surprising that, under these circumstances, a deep spirit of discontent began to show itself among the population of these and other *iláqas*. For some time after the annexation successive members of the Board of Administration were mobbed, and the whole agricultural population began to agitate seriously for a reduction of assessment. But the signs of the times were not immediately understood. Many old Sikh officials had been retained in office, who represented that it was a clamour raised merely to test the powers of endurance of a new *régime*, and the stipulated period of lease was allowed to elapse before relief was afforded.

When, therefore, the next Summary Settlement was made by Mr. Carnac, Deputy Commissioner of the District, it was under an outer pressure, which, however disinclined he was at first to yield to clamour, could result in nothing else than large reductions. His revision of 1851 was again remodelled in 1853 on the basis of a measurement (though without a field map), and these assessments lasted until at various times, in different localities, they were superseded by those of the detailed settlement by Colonel Cracroft. In praise of these assessments it is enough to say that, in conjunction with other causes, they raised the district from a state of great depression to one of prosperity unknown before; and that though it was found necessary still further to reduce the revenue, in order to leave reasonable profits and give hope of its standing the test of fair pressure in unfavourable years and bad seasons, yet Colonel Cracroft's operations did not result, as far as the assessment goes, in much beyond its more equable and uniform adjustment on villages and population, and a reduction on the whole of 5½ per cent.

The First Regular Settlement: Tahsil Tallagang.

The first Regular Settlement of Tallagang was conducted by Mr. Arthur Brandreth. It commenced in June 1855 and was finally completed in May 1864. The assessment has been elaborately explained by the Settlement Officer in his published report. Generally speaking, it may be said that the demand was so framed as in no case to exceed half assets. The following table

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The First Regular Settlement: Tahsil Tallagang. —*concld.*

shows the value of the land revenue under Sikh rule and under the first three British settlements :—

Tahsíl.	Sikh average.	Average of Summary Settlements.		Regular Settlement first year.
		1st.	2nd.	
	Rs.	Rs.	Rs.	Rs.
Tallagang	99,698	90,665	87,150	99,468

The amount shown as the Sikh demand professes to be the average of what they took in the last four years of their rule. In fact the Sikh demand cannot be stated with any accuracy. The local officers of the Lahore Darbár, the *kárdárs,* took as much as they could get, and the demand was not framed so as to leave any profit to the proprietary body. The entries as to the Summary Settlement are average results deduced from the whole period of the currency of each. *Jágirs, ináms* and *muáfis* are always included.

First Regular Settlement (except Tahsil Tallagang).

In the rest of the district the first Regular Settlement was made by Colonel Cracroft. Settlement began in 1860 and was reported to Government in 1864. The assessments were sanctioned by Government on 31st October 1866. The subjoined table shows the highest demand ever realised in the various tahsíls compared with the amount of the summary and regular assessments. Fatehjang had been constituted a separate tahsil in 1859 :—

Tahsil.	Highest demand, of which accurate record exists, ever paid in one year from 1840 onwards.	Summary Settlement demand for year preceding the declaration of the demand of the Regular Settlement.	Demand assessed at Regular Settlement.	Increase.	Decrease.	Rate of regular assessment per head of population.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs. A. P.
Attock	1,65,367	1,31,176	1,29,200	608	2,584	1 10 9
Fatehjang ..	1,34,824	1,19,532	1,11,203	1,235	10,094	1 8 0
Pindigheb ..	1,06,674	71,578	77,301	5,723	..	1 4 8

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First Regular Settlement (except Tahsil Tallagang)—*concld.*

Everywhere, the first Regular Settlement was essentially in regard to the assessment a village settlement. Assessment circles were no doubt formed, but they were not much used. In the main the demands were fixed by the personal knowledge of the Settlement Officer, and by his opinion of what each village could afford to pay. He arrived at his conclusions after consideration of a multitude of matters all more or less relevant to the subject of taxation. These assessments undoubtedly worked well. They were in nearly every case paid with ease and regularity, and led to a general increase in the prosperity of the district and in the amount of cultivation. They were, however, never tried by widespread crop-failure. There were occasionally indifferent harvests, but never anything approaching scarcity.

The Second Regular Settlement: Tallagang Tahsil.

The second Regular Settlement began in Tallagang in December 1874, under the direction of Major Wace, who held charge till May 1877. Various officers presided over the operations from that month till September 1878, when Mr. Thomson assumed the direction, and completed and reported on the settlement in the cold weather of 1880-81. The assessment of the land revenue was wholly performed by Major Wace himself, while the forest settlement was chiefly made by Mr. Thomson. Since the first Regular Settlement, cultivation and the permanent value of agricultural produce had increased, population had expanded, communications had improved, the former assessment had been easily paid, and the people generally were prosperous.

The standard of assessment was, "half-net assets," that is, the assessment was nowhere to exceed half the net profits which a landlord would realise if he cultivated his land through tenants. In fact, the assessment was everywhere much less than this.

The settlement took effect from Kharif 1879. Colonel Wace originally proposed an increase of only 28 per cent. in Tallagang; but the Financial Commissioner considered the proposed assessment too low, and in the result the increase taken was 34 per cent. The assessment, even as enhanced by the Financial Commissioner, was still light, and Colonel Wace himself wrote that the demand was "admittedly below what it would have been had not cultivation increased more rapidly than can safely be immediately followed by our cash assessments."

As might, therefore, be expected the Revised Settlement worked well throughout the tract, the demand being in ordinary years paid easily and without pressure: but it was of course lightened considerably during the term of settlement by the large extension of cultivation that everywhere took place. The whole country, being

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at the mercy of the rainfall, is soon affected by drought, and in unfavourable seasons collections are made with some difficulty, as is only natural; but even in such bad years as those from 1896 to 1900, the suspensions which it was necessary to grant were comparatively small, as shown by the following table:—

	Tallagang. Kharif.	Tallagang. Rabi.	Year in which the amount suspended was realised.
Demand, 1897-98	51,407	60,311	..
SUSPENSIONS.			
1887-88	3,254	..	1888-89
1888-89	3,421	..	1889-90
1895-96	..	..	1896-97
1896-97	4,809	2,021	..
REMISSIONS.			
1890-91	..	54,562	..

Before 1887, it does not seem to have been customary to grant suspensions, at any rate none were granted, and it is hardly possible that none were needed. Since 1887 there has been only one year in which neither suspensions nor remissions were required. This must be regarded as a normal state of affairs.

The remissions in the disastrous year 1890-91 were due to damage done by locusts, which made practically a clean sweep of the spring crop in the whole of Tallagang. All the suspensions have been rendered necessary by drought, chiefly in certain well defined blocks of country, which have a way of being left out in the distribution of any but the most universal rainfall. The revenue suspended in 1887-88 was all recovered within the next year. Coercive processes have very rarely been employed. There are probably few tahsíls where collections give so little trouble as in Tallagang.

The figures given above do not contradict the statement that the settlement worked well in Tallagang. In a dry tract dependent on a precarious rainfall, even a very moderate fixed assessment would not obviate the necessity of giving rather frequent suspensions. If *remissions* are avoided, otherwise than for unforeseen calamities such as hail and locust or exceptionally prolonged droughts, and the bulk of the revenue is paid with punctuality, a settlement may be said to have worked satisfactorily.

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Second Regular Settlement, (except Tahsil Tallagang)

For the rest of the district, that is, all north of the Soan, the assessment of the final Regular Settlement (carried out by Major Cracroft) had been sanctioned for 10 years from 1864, but was allowed to run on for 20 years. The second Regular Settlement began in October 1880, with Mr. Steedman in charge as Settlement Officer.

Measurements were completed under his supervision, but his health broke down, and after 3½ years he was compelled to take leave. Mr. Robertson, previously Forest Settlement Officer, then completed the Settlement. Mr. Steedman had completed the assessment of Attock Tahsíl and reported on it in August 1884. In the Fatehjang Tahsíl the assessment work was done, and the assessment report was written by Captain (afterwards Colonel) F. Egerton. The increase in the area of cultivation since Colonel Cracroft's assessments were announced was the chief foundation on which the enhancements were based. The standard of assessment was "half-net assets." The methods were those at present followed. Assessment circles were formed, a produce estimate worked out, and soil rates framed. The results, compared with those of Colonel Cracıoft, may be thus summarised :—

Tahsils.	Area cultivated at first Regular Settlement.	Area cultivated at Revised Settlement.	Increase per cent. on cultivated area.	Jama at first Regular Settlement.	Incidence of revenue per acre cultivated.	Jama at second Regular Settlement.	Incidence of revenue per acre cultivated.	Increase per cent. in Jama.
	Acres.	Acres.		Rs.	Rs. A. P.	Rs.	Rs. A. P.	
Attock ..	142,655	183,964	29	1,295	0 14 6	1,59,595	0 13 11	24
Pindigheb..	162,435	264,513	63	77,379	0 7 7	1,14,593	0 6 11	48
Fatehjang..	139,886	231,691	64	1,11,279	0 12 9	1,56,738	0 10 9	41

Working of the Second Regular Settlement.

In Attock the Settlement worked very well. The Chhachh and the Sarwála flourished, but the Nála did not thrive so well.

The state of Pindigheb Tahsíl began to cause anxiety from the very beginning of the term of Settlement.

The Lieutenant-Governor, Sir J. B. Lyall, as the result of a tour in the Pindigheb Tahsíl in 1891, called for a report on the working of the Settlement with a view to the introduction of a

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Working of the second Regular Settlement—*contd.*

fluctuating assessment. The Commissioner, Mr. Thorburn, in the course of his report in June 1891 wrote as follows :—

"The former fixed assessment of the tahsíl as it stood in 1884-85 was Rs. 77,379. The new fixed assessment in force since Kharif 1885 is Rs. 1,14,593, being an increase of Rs. 37,214, or 48 per cent. Since then Rs. 82,000 have been suspended, chiefly in the years 1886-87, Rabi 1888 and 1889-90. Of the suspended revenue, Rs. 2,500 have been remitted, and Rs. 13,500 are still unrecovered and probably unrecoverable. The rest, Rs. 66,000, has been realised whenever there was a fair or good harvest. In addition to the above suspensions and remissions, Rs. 45,500 of the Rabi demand for 1890-91 are now being suspended, preliminary to recommendations to remission, owing to the destruction of the spring crops by locusts. About half the rural population has left the tahsíl in search of labour, a quarter or more of the plough cattle have been sold, and indebtedness is general. It is evident that even in the unlikely event of several successive good or fair harvests the condition of the revenue-payers of the tract, money-lending holders excepted, must long continue depressed. The fact is that whenever the Rabi fails, as it does over a larger or smaller area quite every second year, the poorer agriculturists and their dependents forsake their homes and seek labour beyond the limits of the tahsíl. The same happens, but to a much smaller extent, when the Kharif fails."

As the result of this enquiry the Lieutenant-Governor in his letter No. 163, dated 25th September, offered the Pindigheb Tahsíl a fluctuating assessment, the proposed rates on matured crop being—

		Rs.	A.	P.
Sil and Jandál Circles.				
Irrigated	.. .. ..	2	0	0
Unirrigated	Wheat and cotton ..	1	0	0
	Others	0	12	0
Makhad Circle.				
Irrigated	.. .. ..	2	0	0
Unirrigated	Wheat and cotton ..	0	12	0
	Others	0	8	0

The proposed fluctuating assessment was explained to the people, with the result that not a single village consented to abandon their fixed assessments for the proposed fluctuating assessment. They objected partly to the rates which they considered too high, but mainly to the constant interference of Government subordinates, which any system of fluctuating assessment involves. They said that they did not want the Settlement

always with them. The Financial Commissioner opposed the proposal to introduce pure fluctuation, and extracts from his letter are printed in paragraph 479 of the Settlement Manual. Ultimaately the proposal to introduce fluctuating assessment was abandoned and the fixed assessment was sanctioned and allowed to run its course. The harvests of the next few years were good, and the first decade of the term of Settlement in Pindigheb ended more hopefully than it had begun. During the same period in Fatehjang no suspensions were given, but Rs. 8,808 were remitted during the locust year 1890-91. Detail of the suspensions and remissions given in the last ten years of the second Settlement are shown in the following table :—

CHAP. III, C.

Land Revenue.

Working of the second Regular Settlement—*contd.*

YEAR.	Nála.	Gheb.	Sil Soán.	Tahsíl Fatehjang.	Jandál.	Makhad.	Sil.	Tahsíl Pindigheb.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1895-96 ..	..	..	..	..	200	..	6,639	6,839
1896-97 ..	10,563	12,157	100	22,820	943	3,273	14,308	18,524
1897-98 ..	..	..	..	..	25	237	1,313	1,575
1898-99 ..	..	..	..	..	..	380	4,096	4,476
1899-1900 ..	888	3,586	31,667	36,141	..	980	21,369	22,349
1900-01 ..	..	..	..	..	..	..	1,102	1,102
1901-02 ..	310	3,668	13,522	17,500	..	564	14,136	14,700
1902-03 ..	..	319	..	319	..	..	..	..
1903-04 ..	2,224	5,818	4,087	12,129	177	127	4,110	4,414
1904-05 ..	1,727	2,325	1,677	5,729	116	..	1,806	1,922
Total ..	15,712	27,873	51,053	94,638	1,461	5,561	68,879	75,901
Percentage of total suspensions to total revenue demand of 10 years.	8	6	5	6	1	7	8	7
Total remissions 1895-96—1904-05.	2,379	8,121	20,349	30,849	..	770	23,418	24,188
Percentage of total remissions to total land revenue demand of 10 years.	1	2	2	2	..	1	3	2

CHAP. III, C. Land Revenue. Working of the second Regular Settlement—*concld.*

It will be noticed that in this period of ten years the whole revenue was collected in only four years in Fatehjang and in only one year in Pindigheb. In Fatehjang, one per cent. and in Pindigheb two per cent. of the total demand had been remitted. At the end of the year 1904-05, Rs. 6,289 were outstanding under suspension in Fatehjang and Rs. 751 in Pindigheb. In noting on the working of the settlement, Mr. Kitchin wrote as follows :—

"The total assessment is not high, and is even light, but the distribution over villages and over holdings is not good. The measurements, which are the foundation of assessment, were sometimes very bad, and it would appear that the local staff of last Settlement was much less competent and much more corrupt than in any other tahsil. The recorded increase of cultivation, 53 per cent. was greatly exaggerated. Huge fields, cultivated in patches, full of ravines and rocks, were shown as all cultivated. In some cases villages in which the cultivation has actually increased since Settlement, now show a cultivated area 30 per cent. to 50 per cent. less than that at last Settlement. With statistics so unreliable, mistakes were bound to occur and they did occur. At the same time the records were not so bad, but that it has been found possible to correct the maps in the present Settlement, and re-measurement had hardly ever been necessary. The difficulty which has been found in working the Settlement in Pindigheb is, however, in the main, due to bad seasons, but in considering assessment proposals in this tahsíl it must not be forgotten that bad seasons are more common than good seasons, and that the losses suffered in one bad year, the losses of stock and the debts incurred, are not recouped in a single good year, and perhaps can never be recouped at all."

The Third Settlement.

Dates.

When the first and second of the Revised Settlements expired the district had not yet been formed. Tallagang was still a part of Jhelum District, the remaining tahsíls being in Ráwalpindi District. It was found convenient to re-settle Attock Tahsil in connection with the Hazára Settlement. The result is that the third Settlement was carried out at three different times and under three different officers. Mr. W. S. Talbot settled Tallagang, being appointed Settlement Officer towards the end of 1895, and retaining charge till the completion of operations at the end of 1901. To some extent the length of the proceedings was due to interference with the work on account of bad harvests. In 1901 and 1902 Mr. (now Sir Montagu) Butler, Assistant Settlement Officer, Hazára, settled Attock Tahsíl. In Fatehjang and Pindigheb Settlement

operations were in charge of Mr. A. J. W. Kitchin, who also settled Ráwalpindi District, operations lasting from 1902 to 1907. Detailed accounts of the principles and procedure followed by these officers will be found in the published Assessment Reports.

CHAP. III, C. — Land Revenue.

Third Settlement—concld.

Assessment Circles.

The assessment circles framed have already been described. The whole of Tallagang is one circle. Each of the other tahsíls is split up into three circles. The Attock circles are the Chhachh, Sarwála and Nála cricles ; those of Fatehjang are the Nála, Gheb and Sil Soán ; those of Pindigheb Jandál, Makhad and Sil.

Methods.

The methods of Mr. Talbot and Mr. Kitchin were those laid down in the instructions. The estimated value of half the net produce was taken as the maximum for the Government demand. A principal guide was the rents paid in money and kind by an ordinary tenant-at-will, care was taken not to tax unfairly the capital invested in improvements, and full allowance was made for all circumstances directly or indirectly bearing on the profits of the land-owners. Half-net assets estimates, produce estimates and soil rates were all worked out, and the Government demand calculated in the usual way.

In Attock, Mr. Butler framed with great care a half assets estimate based on kind rents, and then rejected it as an assessment guide. A half cash rent estimate was not framed. The assessment guide relied on was obtained by raising the existing revenue rates 17 per cent. for the rise in prices, and applying the new rates thus obtained to the present cultivated area.

CHAP. III, C.

Land Revenue.

Rates of assessments.

The sanctioned rates of assessment per acre were as follows :—

Tahsil.	Assessment Circle.	Irrigated. Chahi.	Irrigated. Abi.	Irrigated. Nahri.	Sailáb.	Lipára or Hail.	Las or Barani I.	Maira.	Rakhar.	Banjar.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Attock	Chhachh	6 8 0	..	..	1 8 0	1 8 0	2 0 0	0 12 6	0 4 0	..
	Sarwála	4 8 0	4 0 0	..	1 8 0	1 8 0	1 0 0	0 6 6	0 3 0	..
	Nála	5 0 0	5 0 0	1 10 0	1 10 0	0 10 0	0 10 0	0 8 6	0 4 0	..
Fatehjang	Nála	5 0 0	5 0 0	..	1 0 0	1 0 0	0 10 0	0 10 0	0 10 0	..
	Gheb	3 8 0	3 8 0	..	0 7 0	0 12 0	0 7 0	0 7 0	0 4 0	..
	Sil Soán	5 8 0	5 8 0	..	1 8 0	1 14 0	0 15 0	0 15 0	0 6 0	..
Pindigheb	Jandál	3 8 0	3 8 0	..	0 8 0	0 12 0	0 12 0	0 8 0	0 8 0	..
	Makhad	3 0 0	3 0 0	..	0 4 0	0 8 0	0 8 0	0 4 0	0 4 0	..
	Sil	4 0 0	4 0 0	..	0 6 0	0 12 0	0 12 0	0 6 0	0 6 0	..
Tallagang	..	4 4 0 (Irrigated)		..	..	0 14 0	0 14 0	0 7 3	0 7 3	0 0 3

The average rate per acre for the whole district was ten annas one pie. In Tallagang the justification for the increase of 32 per cent. was an increase in cultivated area of 23 per cent. and a rise in prices of from 30 to 36 per cent. In Pindigheb efforts were made to redistribute the existing demand rather than to increase the demand on villages which had already shown that the existing assessment was as much as, or more than, they could bear. In the Chhachh and Sarwála the reason for taking an increased demand was the great spread of well cultivation. The Attock Nála had been relatively over-assessed and a full assessment was not taken.

CHAP. III, C. — Land Revenue. Incidence of demand.

The rate of incidence of the third Settlement per acre cultivated is compared below with the rate of incidence at the immediately preceding one :—

RATE OF INCIDENCE PER ACRE CULTIVATED.

Settlement.	Chhachh.	Sarwála.	Nála.	Tahsil Attock.	Nála.	Gháb.	Sil Soan.	Tahsil Fatehjang.	Jandal.	Makhad.	Soán.	Tahsil Pindigheb.	Tallagang.
	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
Second (Regular) Settlement.	1-7-8	0-7-2	0-12-2	0-14-1	0-12-0	0-6-0	1-1-4	0-10-8	0-7-9	0-4-4	0-7-0	0-6-10	0-12-9
Third (Regular) Settlement.	1-9-7	0-8-7	0-13-6	1-0-7	0-11-10	0-7-2	1-2-4	0-12-1	0-8-3	0-4-3	0-7-2	0-7-0	0-8-6

WORKING OF THE THIRD (REGULAR) SETTLEMENT.

A Settlement Officer has to steer a course between the Scylla of over-leniency and the Charybdis of excessive imposition. Succeeding time provides the test. For where, inspite of occasional agricultural calamity, there has been not only no remission but not even cause for suspension, one may not unreasonably suspect the settlement to have been over-lenient. In an insecure tract suspensions must be expected to be part of the normal routine: but remissions except for special calamity such as locusts or hail, should be rare. Another test is the extent to which coercive processes have been necessary in the recovery of the revenue.

CHAP. III, C. — Land Revenue. Working of the third Settlement—*contd.*

Judged by these standards the expiring settlement was on the lenient side in the Chhachh, where not a single suspension or remission is recorded. It is true that occasionally process has been issued : but the necessity for this has been not a desire to avoid payment but to bring into disrepute a particular lambardár. Pathán pride is carried into every phase of life : and while the Pathán proprietor will gladly pay his revenue direct to the Treasury, he will when enmity is bitter, and that is frequent enough, refuse to pay to or through a lambardár. Elsewhere in the district there have been just enough suspensions and remissions to show that the demand was not under-estimated. On the other hand, remissions have been conveniently infrequent : and payments generally punctual.

Remissions by way of reward for War services were earned—

	Rs.
In Fatehjang	17,527
In Pindigheb	23,636
In Tallagang	18,050
In Attock	*Nil.*

Omitting these rewards, and also remissions on account of special calamity such as hail, the following were the true remissions, *i.e.*, suspended revenue, which was written off after three years as irrecoverable in the various tahsíls :—

	Rs.
Attock	1,065
Fatehjang	5,711
Pindigheb	1,140
Tallagang	15,343
Total ..	23.259

Two-thirds of the Tallagang figure : and the whole of the remainder excepting only Rs. 555 were due to the famine of 1920-21.

CHAP. III, C. — Land Revenue.

Working of the third Settlement—concld.

The rise in prices which occurred shortly after settlement, and the extension of well cultivation helped to lighten the burden throughout the district : and its incidence was still further reduced, particularly to the south, by the expansion of cultivation.

It is thus clear that the third Regular Settlement worked smoothly and successfully.

HISTORY OF CURRENT SETTLEMENT.

Introduction.

Mr. Barry's settlement commenced on November 1st, 1923. It was for the first time that the district as a whole was to be settled.

The first operation of Settlement is the revision of the record-of rights : the second, the revision of the assessment : the last, the re-organization, if necessary, of the revenue machinery. The untimely and deeply regretted death of Mr. Barry in July 1927 was the ultimate result of a riding accident in February of that year, when he had gone out over country, rendered impassable by the rain, to announce the new assessment of the Soan villages. He had lived to complete the four assessment reports. The miscellaneous work connected with the winding up of Settlement, and the writing of the Final Settlement Report, devolved on Khan Sahib Chaudhri Sardar Khan, who had been his Extra Assistant Settlement Officer.

Mr. Barry's work throughout reveals the precision of the expert mathematician. It was unfortunate that the period of Settlement was a period of grave financial stringency : and he was not permitted to complete the remeasurement programme which he recommended. Only in Tallagang, where the square system had been adopted, did he consider the existing maps to be reasonably satisfactory. In the other three tahsils, where the Patwáris had used the plane table, the maps were not trustworthy. Though sanction was not accorded to such complete remeasurement as Mr. Barry wished, an effort was made by obtaining the co-operation of the Government of India Survey Department, and also of the Royal Air Force, to make as extensive and accurate a revision of maps as finances permitted. Thus it happened that five separate methods of map correction were followed in different parts of the district—

(1) Ordinary map revision.

(2) Remeasurement on the square system.

CHAP. III, C.

Land Revenue.

Introduction —*concld.*

(3) Remeasurement by traverse stations laid down by the Survey Department at a cost of about 5 annas an acre.

(4) Remeasurement from a skeleton of such traverse stations supplemented by points fixed by plane-table. The cost was estimated at about 3 annas per acre.

(5) Remeasurement by means of tracing from air photos.

The *pros and cons* of the various methods will be found discussed in the Final Settlement Report. Suffice it here to record the final conclusions reached on this experiment in air photography for revenue purposes. They are—

(1) Map photography in a terrain such as that of Pindigheb was adequately accurate, rapid and inexpensive and considerably more profitable than traversing.

(2) It was more accurate and rapid, but also more expensive than the fourth method mentioned *supra.*

(3) It was less rapid and more expensive than ordinary map correction: but where existing maps are bad, *tarmim* does not give adequately accurate results.

It would seem that the fourth method devised would ordinarily be the one to be followed in future.

Revision of assessment.

Not only was the period of Settlement a period of financial stringency: it was also a period of considerable political activity. From 1921 to 1928 the administration of the land revenue in general and the old half-net assets pitch of assessment in particular was on the anvil of legislation in the new Punjab Council—a Council, the majority of which consisted of revenue-paying proprietors. Mr. Barry's orders were to reduce the pitch of assessment to ⅓rd net assets. But the Land Revenue Amendment Act, III of 1928, ultimately reduced this proportion still further. The standard is now 25 per cent. net assets as the limit of assessment in an Assessment Circle. Further it is enacted in section 7 of the Act that in no estate is the increase to exceed two-thirds.

The Act had no retrospective effect: but to redeem an undertaking given in the Legislative Council in 1921 Government decided to revise all Settlement operations, commenced after 1921, in accordance with the Act.

Mr. Barry's results had, therefore, to be modified, and this revision was carried out by Khan Sahib Ahmad Hasan Khan, and completed on October 14th, 1929.

CHAP. III, C.

Land Revenue.

The following table shows the assessments imposed, in the second and third Regular Settlements, by Mr. Barry: and as they stand to-day by tahsils :—

Revision of assessment—*concld.*

Tahsil.	Demand of last year of second Settlement.	Demand of last year of third Settlement.	Demand announced by Mr. Barry.	Amended demand, 1929.
	Rs.	Rs.	Rs.	Rs.
Attock	1,53,287	2,04,033	2,81,092	2,48,602
Fatehjang	1,56,664	1,87,654	2,11,053	2,09,899
Pindigheb	1,14,706	1,21,556	1,40,718	1,40,272
Tallagang	1,21,375	1,50,706	2,06,740	1,55,101
District	5,52,064	6,63,949	8,39,603	7,53,874

These revisions necessitated a revision also of the arrangements for progressive assessments made by Mr. Barry, and also of *mukarraridári* rents, revisions which were completed together with the revision of the assessment.

The percentage of net assets absorbed by the assessment as finally determined is 23: and the increase of the demand on that of the expiring settlement is 14.

Cesses are now payable as follows :— Cesses.

		Rs.	A.	P.	
Local rate	.. ..	12	8	0	Per cent. of land revenue.
Lambardári	.. ..	5	0	0	
Total	..	17	8	0	

These have not been changed as the result of Settlement.

Revenue assignments at the close of settlement operations absorbed Rs. 48,147 of the revenue. Of 256 grants investigated by the Settlement staff, 28 were in favour of village institutions: 140 were *jágirs* or *muáfis* in perpetuity: 64 were war *muáfis* for life: 23 were other *muáfis* for life: and 1 was for the term of settlement.

Revenue assignments.

CHAP. III, C. — Land Revenue. Revenue assignments—*concld.*

Orders on the Settlement Officer's proposals as regards the current Settlement have not been received. At last Settlement it was observed that in Tallagang Tahsíl none of the large grantees are *zamíndárs* in the ordinarily accepted meaning of the word: the largest of all are absentees. The principal grantees are the Chhachhi family of Pachnand, Rs. 6,629, and the Mahant of Kot Sárang, Rs. 715. In Fatehjang the grants of the Sardár of Kot aggregate Rs. 6,184; the Khattar family of Dhrek and Bahtar received Rs. 908; the Ghebas of Malál receive Rs. 500; and the Alpiál family of Chakri receive Rs. 800. The Maliks of Pindigheb hold one village in *jágír*, and in 26 villages receive as *chahāram* one-fourth of the whole assessment. The *chahāram* is made up of a *taluqdári* of 10 per cent. or 15 per cent. paid by the owners, and a *jágír* of 15 per cent. or of 10 per cent., bringing the total grant up to 25 per cent. in each case. The whole *jágír* paid by Government is Rs. 3,841, and the village owners in the form of *taluqdári* pay Rs. 2,581. The only other large grantee in Pindigheb is the Khán of Makhad, who, under the name of *chahāram*, receives one-fourth of the revenue of all the Pathán villages in the circle. This amounts to Rs. 1,829. In addition to the grants in this district, the Khán of Makhad has large *jágírs* and feudal dues in the Kohát District. In Attock Tahsíl Khan Bahadur Malik Muhammad Amin Khan, O.B.E., of Shamsábád, receives Rs. 2,200, Mahant of Jassián, Rs. 1,540, and the Malláhs of Attock Rs. 1,095.

Instalments and dates of payment.

The new assessment was introduced as under—

Tallagang Tahsíl from Kharif 1925,
Attock Tahsíl from Rabi 1926,
Fatehjang Tahsíl from Kharif 1926,
Pindigheb Tahsíl from Rabi 1927.

The previous dates of instalments payable in two harvests were—

	Kharif.	*Rabi.*
Tallagang Tahsíl ..	1st January, ½ 1st February, ½	1st July, ½ 1st August, ½.
Attock Tahsíl ..	15th January	15th July.
Fatehjang Tahsíl ..	15th January	15th July.
Pindigheb Tahsíl ..	15th January	15th July.

As the above dates were suitable and the people did not wish any change, they were, with the approval of the Financial Commissioner, continued as before. A statement showing the details of

villages arranged according to the proportion of each instalment fixed during the last as well as the present settlement is as below :—

Instalments, etc.—*contd.*

STATEMENT SHOWING THE DETAIL OF VILLAGES ARRANGED ACCORDING TO THE INSTALMENTS FIXED FOR THE COLLECTION OF LAND REVENUE DEMAND IN THE ATTOCK DISTRICT.

Tahsíl.	Circle.	Settlement.	Number of village whose people accepted the payment of land revenue in the instalments.					Remarks.
			Kharif ½. Rabi ½.	Kharif ⅓. Rabi ⅔.	Kharif ⅖. Rabi ⅗.	Kharif ¼. Rabi ¾.	Kharif + Rabi Whole.	
1	2	3	4	5	6	7	8	9
Tallagang	Tallagang	3rd	54	22	12	..	..	
		4th	52	28	7	..	..	
Attock ..	Chhachh ..	3rd	70	..	..	..	..	
		4th	69	1	..	..	..	
	Sarwála ..	3rd	43	..	..	..	..	
		4th	35	1	4	..	3	
	Nála ..	3rd	83	..	..	..		
		4th	67	13	..	3		
	Total of tahsíl.	3rd	196	..	..	..	..	
		4th	171	15	4	3	3	
Fatehjang	Nála ..	3rd	26	..	..	..	..	
		4th	4	13	8	1	..	
	Gheb ..	3rd	75	..	..	..	..	
		4th	51	23	.9	..	..	
	Soán ..	3rd	95	..	..	..	..	
		4th	89	3	4	..	..	
	Total of tahsíl.	3rd	196	..	..	..	..	
		4th	144	39	21	1	..	
Pindigheb	Jandál ..	3rd	..	22	..	..	..	
		4th	4	18	..	..	..	
	Makhad ..	3rd	7	3	..	..	..	
		4th	10	..	..	..	..	
	Síl ..	3rd	86	6	13	..	..	
		4th	82	17	3	..	..	
	Total of tahsíl.	3rd	93	31	13	..	..	
		4th	96	35	3	..	..	
District Total	..	3rd	539	53	25	..	..	
		4th	463	117	35	4	3	

CHAP. III, C.
Land Revenue.
Instalments, etc.,—*concld.*

The instalments for the payment of the new demand were fixed in accordance with the wishes of the people. Instalments are not always fixed by the people in accordance with the degree of the areas matured in each harvest, but certain other factors also are taken into consideration by them. For instance, prosperous owners like to pay a larger share of their revenue with the Kharif, as it enables them to dispose of their *rabi* crops at their leisure and frees them from the necessity of selling grain when the market is most unfavourable. The small proprietors, who have no surplus yield in their hands for sale, prefer to meet the payment of the revenue demand by the sale of their cattle and other belongings in the winter months of the year. They are often afraid of the double payment of this demand when a bad Kharíf is followed by a good Rabi. The *kharíf* crop in the southern three tahsíls is generally considered a cattle crop and so the surplus yield derived from the *rabi* crop, which is the people's crop, is often utilized by *zamíndárs* in the cold weather also.

Water Mills.

In the Attock Tahsíl Government has waived its claim to an assessment on water mills temporarily, but has expressly reserved the right to review its orders at any time. In Fatehjang and Pindigheb water mills have been excluded from assessment. In Tallagang Mr. Talbot's rate of Rs. 5 was raised to Rs. 6 : but, as in the preceding settlement, the matter was not taken into account when the internal distribution of the village assessment on holdings was made.

Suspensions and remissions.

With the exception of Tahsíl Attock the district has been classed as insecure. The general rule therefore is that suspensions are granted freely, but remissions are to be given seldom, and recoveries are made on the first opportunity. The three harvests' rule, that is, that suspended revenue outstanding for three harvests should be remitted, is not followed. Generally the *kharíf* is the cattle crop, and the *rabi* is the people's crop. Suspensions are not required for a poor *kharíf* following a fair *rabi*, if there is moisture for *rabi* sowings. But except in maize-growing villages it will seldom be wise to recover Rabi suspensions in Kharíf.

Section D.—Miscellaneous Revenues.

EXCISE.

Liquor.

The district being mainly Muhammadan is very temperate Illicit distillation is unknown : and country liquor shops spread over its area of over 4,000 square miles number only 12, being 6 less than in 1907. Added conveniences to the travelling public and the opening of Railway Refreshment Rooms have caused an

increase in the number of foreign liquor licenses, from 3 to 10: but these are for travellers. The nearest Distillery is at Ráwalpindi.

CHAP. III. D.

Miscellaneous Revenue.

Drugs.

The poppy is not cultivated and only Government opium is used. The use of hemp drugs is very limited: shops being nine in number only. Smuggling of charas exists: but mostly in transit. In 1927-28 no less than 123 smugglers were caught: and 16 maunds 8 seers seized. Similarly there were 56 cases of opium smugglers, and 1 maund 23 seers opium was captured.

Excise revenue increased from Rs. 19,206 in 1907 to 75,083 in 1928: but the increase is due to stricter taxation and not to growing consumption. Further statistical details will be found in Table 41 of volume II.

INCOME-TAX.

The trade of the district being inconsiderable, the income-tax collections are, in comparison with other districts, small. The large majority of assessees are small bankers and money-lenders in the villages and small towns. Income-tax is now a department of Central Revenues: and entirely divorced from District administration, except when recoveries have to be made from defaulters. The increasing returns given in Statement 42 reflect the growing prosperity of the mercantile class.

STAMPS.

Stamps are an index of litigation. When the new Limitation Act was about to come into force there was a sudden rush of litigation: and special arrangements had to be made to cope with the demand for stamps. But the stamp revenue in itself calls for no special comment.

LOCAL RATE.

The local rate is at its maximum—*viz.*, a cess of 12½ per cent. on the land revenue.

Section E.—Local and Municipal Government.

LOCAL BODIES.

There are three Municipalities—all second class—and four Small Towns in the district, as follows:—

I.—Municipalities—

1. Campbellpur. | 2. Hazro.
3. Pindigheb.

II.—Small Towns—

1. Attock. | 2. Hassan Abdál.
3. Fatehjang. | 4. Tallagang.

CHAP. III, E.

Local and Municipal Government.

I.—Municipalities.

I—MUNICIPALITIES.

Campbellpur Municipality.

The Attock District with its headquarters at Campbellpur came into existence as a separate district from April 1904, but its headquarters were actually shifted to Campbellpur from Ráwalpindi in the end of March 1906.

Campbellpur at that time was divided into two separate *ábádis* known as (1) Civil Station, and (2) Civil Bazar, Campbellpur.

The latter was constituted as a Notified Area under the Municipal Act (now Act III of 1911) by notification No. 631, dated 3rd November 1908.

Subsequently the "Civil Station" was included in the Notified Area by notification No. 520, dated 24th September 1912.

The Campbellpur Notified Area continued as such up to 1924 when it was replaced by the present Municipality, which was gazetted with effect from 1st February 1924 and its boundaries defined in Punjab Government notification No. 1559, dated 15th January 1924.

The population at the census 1921 was 3,669: but it has increased since then.

The elective system was introduced in 1927.

There are altogether 8 members of the Committee, 6 of whom are elected and 2 nominated.

Of the 2 nominated members one is the Deputy Commissioner *ex-officio*, the other a non-official.

The Committee generally works through the following Sub-Committees :—

(1) Finance Sub-Committee,
(2) Public Works Department Sub-Committee,
(3) Garden Sub-Committee,
(4) Education Sub-Committee,
(5) Public Health Sub-Committee,

and has adopted the following bye-laws :—

(1) Building Bye-laws ..	Notification No. 14244, dated 28th April 1922.
(2) Registration of births and deaths.	Notification No. 1433, dated 12th January 1923.
(3) Slaughter-house ..	Notification No. 17853, dated 17th June 1922.

CHAP. III, E.

Local and Municipal Government.

I.—Municipalities—Campbellpur—concld.

(4) Vaccination ..	Notification No. 21-A-IV-14, dated 15th December 1923.
(5) Offensive and dangerous trade	Notification No. 22026, dated 19th October 1925.
(6) Weights and measures ..	Notification No. 8195, dated 15th March 1927.
(7) Meat	Notification No. 10611, dated 4th April 1927.
(8) Water-supply	Notification No. 32064, dated 7th December 1927.

The principal source of income is the house-tax which is levied on all residential houses and shops according to their annual rental value. It was sanctioned by Punjab Government notification No. 12308-B. & C., dated 28th May 1917.

Capital expenditure is financed by sale of land sites: being portions of land made over to the Committee when the site of the Civil Bazar was first acquired.

The house-tax produces from Rs. 16,000 to Rs. 17,000: and from Rs. 2,000 to Rs. 3,000 is earned from miscellaneous heads. The rest of the income, which approximates to half a lakh in all, is supplied by profits from Municipal property and grants-in-aid.

The Committee contributes Rs. 2,000 per annum to the maintenance of the Civil Hospital, and has engaged an whole-time Lady Health Visitor.

The Committee maintains an Anglo-Vernacular Middle School for girls, which it is desired to raise to the High Standard: and an excellent Primary School for boys. In addition three private schools for girls receive grants-in-aid.

There is a Fire Engine and Fire Brigade, and a very fine Water Works, which supplies pipe water within the Municipality. The Water Works Scheme cost the Committee Rs. 1,87,785, of which Rs. 93,892 were contributed by Government.

Aided by the District Board, the Committee maintains a very excellent garden: in which are tennis courts used by the town club.

The population of Campbellpur contains probably a larger proportion of intelligentsia than any other town in India. The level of Municipal administration is, therefore, high. The streets are well paved, lighted, and drained: and finances well administered. There is a Reserve Fund of one lakh in War Bonds.

CHAP. III, E.

Local and Municipal Government.

I.—Municipalities—Hazro.

For health and scenery the town has an almost ideal situation. It is a municipality that is flourishing and should continue to expand and prosper.

The house-tax falls at the rate of Rs. 5·4 per head of population.

HAZRO MUNICIPALITY.

Population in 1921, 8,408 : a decrease since 1911.

It was constituted a second class Municipality in 1886 by notification No. 100, dated 10th February 1886.

The Municipal boundaries were extended in the summer of 1930, an extension necessary to include in Municipal limits the net work of warehouses which had grown up in the fields outside the octroi posts : and designed to facilitate evasion of the impost.

The right of electing members was withdrawn from the Committee by the Punjab Government in 1900 on account of misappropriation of Municipal funds, and intrigues and feuds among members. It was restored to it by Punjab Government letter No. 4792-S. (L. S.-G.—Comts.), dated 4th October 1922.

There are 8 members, 6 of whom are elected from the 6 wards and the remaining 2 appointed. The Deputy Commissioner of the district and the Assistant Surgeon in charge of the Municipial Dispensary, Hazro, are *ex-officio* members. There are 2 Vice-Presidents.

The Committee works largely through the following standing Sub-Committees :—

(1) Finance Sub-Committee,

(2) Building Sub-Committee,

and has adopted the following bye-laws :—

(1) Licensing Kerosene Oil and Matches.	Notification No. 56, dated 1st February 1900.
(2) Registration of Births and Deaths.	Notification No. 257, dated 29th May 1902.
(3) Business ..	Notification No. 23, dated 7th October 1902.
(4) Regulating carts and hand carts	Notification No. 823, dated 20th November 1909.
(5) Building	Notification No. 392, dated 26th July 1912.
(6) Hackney Carriage ..	Notification No. 17, dated 1st May 1915.
(7) Supply of Milk and Butter ..	Notification No. 717, dated 30th November 1915.
(8) Discharge of Fire-works ..	Notification No. 15787, dated 7th August 1917.

CHAP. III, E.

Local and Municipal Government.

I.—Municipalities—Hazro—*contd.*

(9) Compulsory Vaccination .. Notification No. 40-A.I.-266, dated 23rd April 1927.

(10) Slaughter-house .. .. Notification No. 809, dated 15th November 1916.

The principal source of income is octroi, supplied principally by the import of—

(1) Grain.
(2) Sugar and gur.
(3) Ghee.
(4) Fruit.
(5) Wood (buildings).
(6) Cloth.
(7) Coal.

Income from octroi and Special Acts has averaged about Rs. 28,000 to Rs. 29,000 and another Rs. 4,000 to Rs. 6,000 are realised from Municipal properties. There is a small miscellaneous income. The rest of the sum available for expenditure, which in a normal year is about Rs. 36,000, is from grants-in-aid. The extension of the boundaries is expected to result in an increase of at least Rs. 5,000 in income from octroi.

The Committee maintains a bonded warehouse.

Octroi schedules were last revised in Punjab Government Notification No. 19153, dated 17th July 1923.

The Committee used to maintain a High School for Boys, but the Secondary and Middle Departments were taken over by Government in October 1922.

It now maintains the following Schools :—

(1) Municipal Board Butler Primary School,
(2) Municipal Board Girls School,
(3) Municipal Board Urdu Girls School,

and, in addition, is giving grants-in-aid to the 2 Girls' and 1 Boys' Schools opened privately by different communities.

The Committee is probably unique in maintaining two hospitals, one a general Hospital, the other, the Josephine Hospital for Women, designed by Mrs. Josephine Garbett, and opened by Sir Malcolm Hailey on 14th January 1928. The Hospital has ten beds for in-patients: all of which are endowed. Towards the expenses of this Hospital the Committee receives about Rs. 1,000 per annum from endowments, and also a contribution equivalent to 25 per cent. of its cost from the District Board.

Town Police used to cost Rs. 210 per mensem, but these were taken over by Government in 1911.

CHAP. III, E.

Local and Municipal Government.

The Committee employs a paid Secretary.

Octroi falls at the rate of Rs. 3·3 on each head of the population: but tobacco, the chief industry of the town, still goes untaxed.

PINDIGHEB MUNICIPALITY.

I.—Municipalities—Pindigheb.

The Pindigheb Municipality is of the 2nd class. It was established by Punjab Government notification No. 1773, dated 23rd October 1874.

Its boundaries were originally fixed by Punjab Government notification No. 1967, dated 14th December 1874, and were subsequently revised by notifications Nos. 16 and 101, dated 13th January 1887 and 11th March 1912, respectively.

The town is peculiar in that the Maliks of Pindigheb have proprietary rights over the town site. The population in 1921 was 9,928. The Maliks naturally have a large say in the affairs of the Committee, which is entirely nominated.

There are 9 members, of whom 3 are *ex-officio*, *viz.*, the Sub-Divisional Officer, the Tahsíldár, and the Assistant Surgeon, in charge Dispensary, Pindigheb. The Sub-Divisional Officer is the *ex-officio* President, and the Tahsíldár *ex-officio* Vice-President of the Committee.

There are no sub-committees, standing or temporary, and the work is carried on by and under the supervision of the President, whose orders are appealable to the Deputy Commissioner.

In the early years of the Municipality's existence the Municipal income was leased out on an annual contract, but the practice was discontinued in 1877. The budget balances round about Rs. 27,000.

Practically the only source of income is octroi, which is levied on the trade in grain, cloth, gur, sugar, ghee, soap, cotton, oil and wood. The octroi schedule was last revised in 1925 by Punjab Government notification No. 2489, dated 24th January 1925.

The Committee maintains a dispensary and the following schools :—

(1) Municipal Board Vernacular Middle School for Girls.
(2) Municipal Board Gurmukhi Primary School for Girls.
(3) Municipal Board Primary School for Boys.

It gives grants-in-aid to the following private schools :—

(1) Khalsa Primary School (Boys).
(2) Khalsa Primary School (Girls).
(3) Bhai Balwant Singh Primary School (Boys).

The Committee has adopted the following Bye-laws :—

(1) Slaughter-house	Notification No. 15551, dated 19th August 1918.
(2) Registration of Muhammadan Marriages.	Notification No. 15386, dated 10th June 1919.
(3) Registration of Births and Deaths.	Notification No. 52, dated 16th January 1891.

Financially the Committee is just paying its way.

II.—Small Towns.

ATTOCK SMALL TOWN.

Population in 1921—1,124.

Attock was originally a Municipality of the 2nd class, and was discontinued as such from 31st March 1901, when it was reduced to the status of a Notified Area by Notification No. 238, dated 3rd June 1901. It continued as a Notified Area for about 23 years, but it was converted into a Small Town under the Punjab Small Towns Act (1922) by Notification No. 20841, dated 8th September 1924.

At present the Small Town is comprised of Attock proper and Malahi Tola, which are situated at a distance of over one mile from each other. Attock proper has entirely gone into decay and therefore Malahi Tolah is mainly responsible for the Small Town.

The Small Town Committee consists of 5 members in all, four of whom are elected and one nominated.

The Tahsildár, Attock, is the *ex-officio* nominated Member and elected President of the Small Town Committee.

The chief source of income is a town rate.

Income and expenditure for the last 3 years are tabulated below :—

	Income.	*Expenditure.*
	Rs.	Rs.
1927-28	708	466
1928-29	563	510
1929-30	558	668

The budget balances round about Rs. 500.

The Small Town Committee have adopted the following General Orders :—

(1) Depositing Manure and Rubbish, &c.	Notification No. 106-A.XIV-14, dated 1st September 1926.
(2) Prevention or removal of movable or immovable encroachments.	Notification No. 108-A.XIV-14, dated 1st September 1926.
(3) Erection or re-erection of buildings.	Notification No. 107-A.XIV-14, dated 1st September 1926.

CHAP. III, E. — Local and Municipal Government.

So long as the Fort is garrisoned, it is convenient to maintain control over the adjacent *ábádi*. The small income of this diminished township barely suffices for the expenses of watch and ward.

II.—Small Towns—Hassan Abdál.

HASSAN ABDAL SMALL TOWN.

Population in 1921, 5,538. There was originally a Notified Area under the Punjab Municipal Act, constituted by Notification No. 73, dated 7th February 1910.

It was converted into a Small Town under the Punjab Small Towns Act (1922) by Notification No. 3021, dated 29th January 1924.

With the opening of the Ráwalpindi-Havelian Railway its importance as the depôt for Abbottabád vanished: but it is still a grain centre: and its water mills attract grain and tobacco from far a field. In recent years the Panja Sahib has grown into prominence and with it the Sikh population of the town have increased in numbers and influence.

The Small Town Committee is comprised of 8 members six of whom are elected and 2 nominated.

The nominated members are also non-officials. In this respect this Small Town is distinguished from all the other local bodies in the district.

The principal head of income is a town rate. The income averages about Rs. 6,000: and is expended mostly on conservancy, lighting: and education. Up to 1928 it had to maintain Town Police: but these have now been taken over by Government. The town did very well in repelling the trans-border raiders, who attacked it in 1926: in acknowledgment of which four persons received grants of land.

The Small Town Committee have adopted the following General Orders:—

(1) Protection from pollution of drinking water.	Notification No. 122-A.XIV-8, dated 20th December 1926.
(2) Prohibition of removal of water from any well or tank declared to be unfit for human consumption.	Notification No. 123-A.XIV-8, dated 20th December 1926.
(3) Deposit of manure and rubbish, &c.	Notification No. 124-A.XIV-8, dated 20th December 1926.
(4) Repairs or removal of dangerous or ruinous buildings.	Notification No. 125-A.XIV-8, dated 20th December 1926.
(5) Removal of noxious vegetation	Notification No. 126-A.XIV-8, dated 20th December 1926.
(6) Erection or re-erection of buildings.	Notification No. 128-A.XIV-8, dated 20th December 1926.

(7) Prevention and removal of immovable encroachment.	Notification No. 127-A.XIV-8, dated 20th December 1926.
(8) Licensing of premises for preparation and sale of articles of food and drink.	Notification No. A.-XIV-18-I., dated 11th January 1927.
(9) Slaughter-houses	Notification No. 24-A.XIV-18. dated 18th February 1927.
(10) Registration of births and deaths	Notification No. 75-A.XIV-18. dated 24th August 1927.

The financial position is adequately satisfactory.

FATEHJANG SMALL TOWN.

(*Population in* 1921—3,879).

Fatehjang was originally constituted a Notified Area under the Punjab Municipal Act (now Act III of 1911) by Notification No. 76, dated 7th February 1910: and continued as such until 1924 when it was converted into a Small Town under the Small Towns Act (1922) by Notification No. 3013, dated 29th January 1924.

There are altogether 8 members of the Small Town Committee, six of whom are elected and 2 nominated.

The Tahsíldár of Fatehjang and a non-official are the 2 nominated members.

The chief source of its income is a town rate.

The budget balances at between Rs. 4,000 and Rs. 5,000.

The town rate falls at the rate of Re. 1 and the total income at Re. 1-1-0 per head of population.

The Small Town Committee have adopted the following General Orders :—

(1) Deposit of manure and rubbish,	Notification No. 95-A.I.-221, dated 7th August 1926.
(2) Erection and re-erection of buildings.	Notification No. 96-A.I.-221, dated 7th August 1926.
(3) Prohibition to remove water from a public well or tank declared to be unfit for human use.	Notification No. 101-A.I.-221, dated 14th August 1926.
(4) Repairs and removal of dangerous and ruinous buildings.	Notification No. 100-A.I.-221, dated 14th August 1926.
(5) Slaughter-houses	Notification No. 99-A. I.-221, dated 11th August 1926.
(6) Prevention of encroachments	Notification No. 102-A.I.-221, dated 14th August 1926.
(7) Protection from pollution of drinking water.	Notification No. 110-A.I-221, dated 16th September 1926.
(8) Registration of births and deaths	Notification No. 8-A.I.-221, dated 3rd February 1928.

CHAP. III, E.

Local and Municipal Government.

The town is extending more and more towards the Khaur road. It is well paved: the standard of sanitation good: and finances satisfactory.

TALLAGANG SMALL TOWN.

(Population in 1921—6,358.)

II.—Small Towns—Tallagang.

Tallagang was originally a Notified Area constituted under the Punjab Municipal (Act III of 1911) by Notification No. 598, dated 6th November 1912.

In 1924 it was converted into a Small Town under the Punjab Small Towns Act (1922) by Notification No. 3027, dated 29th January 1924.

The Committee consists of 9 members of whom 7 are elected and two nominated: the latter being the Tahsíldár of Tallagang and a non-official.

The chief source of income is a town rate.

The budget balances at between Rs. 2,000 and Rs. 3,000.

The Committee is a difficult one to control: as there are two parties, one of town shopkeepers, the other the *zamíndárs*, who are about equally balanced, and the representatives of each of which are busy endeavouring to throw the burden of taxation on to the other. The success of the Committee depends on the strength of the Tahsíldár. Self-Government of the locality by the locality does not exist. Tahsíldárs are changed only too frequently: and the Committee is seldom happy.

The closing credit balance of the Small Town Committee on 31st March 1928 amounted to Rs. 77-14-0.

The town rate falls at the rate of Re. 0-6-0 and total income at Re. 0-7-0 per head of population.

The Small Town Committee have adopted the following General Orders :—

Erection or re-erection of buildings.	Notification No. 113-A-XIV-17, dated 19th October 1926.

Finances are always precarious: and the Committee calls for constant supervision.

ATTOCK DISTRICT BOARD.

Attock District Board.

The District Board was constituted in 1903 under Act XX of 1883, and performs for the district at large many of the functions for which the towns are indebted to their Municipal Committees. The elective system was introduced under Punjab Government Circular No. 16941 (L. S.-G.—Bds.), dated the 6th June 1922, whereby the elected element was fixed at 33 per cent. of the total number of members, but this limit was raised to 66 per cent. on 28th June 1927 for subsequent elections.

There are 42 members in all. The Deputy Commissioner is *ex-officio* President, but much of the practical work is done by the members in their respective Iláqas and by the Sub-Committees.

CHAP. III, E. — **Local and Municipal Government.** Attock District Board —*concld.*

Details of income and expenditure will be found in the appropriate statement in Form No. 45 of the Statistical Volume. The chief source of local income is the local rate: fixed at Rs. 12-8-0 per cent. and recovered as a cess on land revenue. The district being very poor, over 4,000 square miles of area producing a land revenue of roughly 8 lakhs only, the resources of the Board are consequently very limited : and liberal grants are made by Government for education, medical, cattle-breeding and communications Other sources of income are cattle-pounds, school fees, garden receipts, cattle fair fees, sale of trees, staging bungalows and *saráis*, and Nazul properties. Haisiyat tax was imposed in the year 1918, but it has now been discontinued and a profession tax is to take its place. There are at present 26 cattle-pounds. There is only one District Board Ferry, that at Makhad.

The permanent heads of expenditure are cattle-pounds, education, medical, public health, arboriculture, gardens, veterinary, upkeep of roads and buildings. The recent expansion of education, medical relief, and improvement of roads in the district would have been impossible without substantial grants-in-aid.

The maintenance of roads and veterinary and breeding establishments have been noticed elsewhere. Education also has its appropriate paragraph. But it is the District Board which controls or advises Government on all these matters. The level of debate and the sense of responsibility displayed is high.

The following is a synopsis of the budget of four consecutive years :—

Table 45—District Fund.

Year.	ANNUAL INCOME IN RUPEES.			ANNUAL EXPENDITURE.								Remarks.
	Provincial rates.	Other sources.	Total Income.	General Administration.	Police (cattle-pounds).	Education.	Medical.	Other Departments.	Other miscellaneous.	Public Works.	Total expenditure.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1924-25 ..	83,455	3,08,552	3,92,007	10,969	2,960	1,78,764	47,639	48,101	579	1,19,974	4,08,986	
1925-26 ..	85,510	4,65,431	5,50,941	11,193	3,481	2,03,499	42,063	33,763	1,697	2,26,587	5,53,183	
1926-27 ..	85,296	5,67,473	6,52,769	26,173	5,147	3,22,092	91,438	42,912	2,031	1,39,883	6,29,676	
1927-28 .	1,10,854	4,44,529	5,55,183	39,585	4,884	3,01,224	89,813	57,380	533	1,04,909	5,38,823	

Section F.—Public Works.

CHAP. III, F.

Public Works.

Roads.

The district forms one of the Sub-Divisions in charge of the Executive Engineer, Ráwalpindi. The chief developments since 1907 are as follows :—

A metalled road has been constructed from *Fatehjang to Khaur*—a distance of 26½ miles. This road was primarily made for Attock Oil Company, but has proved very useful for general traffic also. The road from Tarnaul to Khushálgarh has been taken over from the District Board and has been metalled from Tarnaul to a little beyond Gagan, *i.e.*, from mile 181 to 209.

Campbellpur-Hatti Road has also been taken over from the District Board and from mile 1 to 7 has been widened from 9′ to 12′.

Campbellpur-Basál-Pindigheb Road has also recently been transferred to this Department. In mile 7 of Campbellpur-Basál Road a suspension bridge is being built over the Haro River.

Grand Trunk Road.—A girder bridge was completed in 1927 in mile 208, Grand Trunk Road, over the Haro River.

Buildings.

All district buildings which were in hand in 1907 have been completed.

The Normal School, Campbellpur, has been converted into an Intermediate College. A Manual Training School has been constructed, and additions made to the Boarding House attached to Government High School at Campbellpur. High Schools at Hazro, Pindigheb and Tallagang have been provincialized and taken over. Historical buildings have since been transferred to the Archæological Department. The hospital at Fatehjang has also been provincialized and taken over from the District Board.

Section G.—Army.

MILITARY STATIONS.

The only military stations in the district are at Campbellpur and Attock.

Campbellpur.

The normal garrison at Campbellpur is one Field Battery, one Ammunition Column, R.A., and one Camel Corps. The local affairs of the Cantonment are managed by a Cantonment Committee under the presidency of the Colonel Commanding the Station.

The troops in Attock are a detachment of Native Infantry.

RECRUITING.

The district used not to be a good one from the recruiting officer's point of view. The Sagri Patháns take military service eagerly, and their example is being followed by the Alpiáls. But the other tribes were not attracted by the army.

In the War, however, Attock did well: and ten rewards of I.O.M. were given to men of the district. In men it contributed 18,851, or a percentage of 6·9 of the total male population. As elsewhere, these tahsils did best where conditions of life are harvest: and Attock Tahsíl fell far behind. The actual figures are:—

Attock	3·8
Fatehjang	7·9
Pindigheb	8·2
Tallagang	8·7

In consequence, when Awán colonists were called for in 1928-29 the whole of the land was distributed to *ex*-soldiers of Tallagang or Pindigheb.

The district contributed no less than Rs. 1,01,187-7-0 in various forms of gifts for War purposes. The total amount invested in the First War Loan reached Rs. 4,13,448.

Section H.—Police and Jails.

(*A*) *The Police Force.*

As elsewhere, the police force of this district is controlled by a Superintendent of Police, who has under him one or more Gazetted Officers (Assistant Superintendents of Police or Deputy Superintendents of Police). The district is attached to the Western Police Range, the headquarters of the Deputy Inspector-General in charge of the Range being at Ráwalpindi.

The names of the *thánás* and the outposts are as follows :—

Police Station.	*Outposts attached to Police Stations.*
Sadar	Chhoi, Attock.
Hazro	Haroon.
Hassan Abdál	..
Fatehjang	..
Chauntra	Chakri.
Pindigheb	..
Pindi Sultáni	Basál, Nára, Jand.
Makhad	Injra
Láwa	..
Tamman	..
Tallagang	..

CHAP. III, H.

Police and Jails.

Police—*contd.*

The outpost at Chhoi is not manned temporarily, but will be used when the bridge over the Haro, which is in course of construction is built, and direct communication is established between Campbellpur and Basál. The Police at Attock are mainly employed in patrolling the bank of the river Indus, while the posts at Basál, Nára, Jand and Injra are invaluable as a safeguard against trans- Indus gangs. The post at Chakri is an investigating out-post. Except at Police Station Hazro, where there are two Sub-Inspectors, only one Sub-Inspector with two Head Constables and ten or twelve Constables is attached to each Police Station.

In the urban areas there are posts at Campbellpur Civil Pazar, Campbellpur Cantonment, Hazro and Hassan Abdál. A scheme has been approved by which the towns of Fatehjang, Pindigheb and Tallagang will be provided with town Police, at the cost of Provincial revenues, in lieu of chowkidárs who are maintained at present (1928).

The total Police establishment is—

Superintendent of Police	1
Deputy Superintendent of Police	1
Prosecuting Inspector	1
District Inspectors	2
Sub-Inspectors	20
Head Constables	80
Foot Constables	441

The district is divided into as many Sub-Divisions or circles as there are Gazetted Officers and Inspectors, each officer supervising the work of Police Stations in the areas allotted to him.

Two Punitive Posts were located in the district in 1928, *viz.*, at the village of Boliawál in the jurisdiction of Police Station Sadar, and at the village of Burhán in Police Station Hassan Abdál : the details regarding which are :—

Name of Post.	Date of location.	Strength.	Annual cost.
			Rs. A. P.
(a) Boliawál	1-6-27 to 31-5-29	1 Sub-Inspector .. 4 Constables	6,259 9 6
(b) Burhan ..	1-3-26 to 28-2-29	1 Sub-Inspector .. 5 Constables .	12,028 2 7

CHAP. III, H.
Police and Jails.
Police—contd

That at Burhán was abandoned before its period expired, the people having turned over a new leaf, and started a Panchayat which dealt faithfully and promptly with evil doers.

Recruitment is from agricultural tribes by the Superintendent of Police. Besides requiring the usual standard of physique, efforts are made to get educated men as constables, and men who have passed the Matriculation examination are now coming forward. An additional attraction is the inauguration of a selection grade for educated Foot Constables, carrying an initial pay of Rs. 20. Recruits, on being enrolled, undergo a course of 3 to 6 months' training in their Lines. There is also a 'refresher' course for the constables attached to Police Stations, who attend headquarters by rotation.

An armed Reserve of 1 Sub-Inspector, 3 Head Constables, and 34 Constables, is maintained at headquarters to deal with serious outbreaks of crime, and is of use in dealing with gangs from Tribal Territory. This force is armed with ·303 Rifles, and includes a section of 1 Head Constable and 6 Foot Constables trained as signallers.

(*B*) *Forms of crime.*

Dacoities, murders, arson and mischief all occur. The dacoities are usually the work of trans-border, or at least, Trans-Indus outlaws. A perennial source of anxiety is the wheeled and pedestrian traffic on the Grand Trunk Road and other important highways, as also on the roads which lead to places where the cattle shows or the local fairs are held. Highway robbery becomes common, if patrolling is slackened or if crime of this class is burked or not reported. Raiding of wealthy villagers by local gangs is now very rare, but famine days are always dangerous: and gangs from Miánwáli are not unknown.

The problem of dacoities committed by the trans-Indus and trans-border gangs is more difficult. In order to view the matter in its true perspective, it is necessary to remember that the district has a frontage of about 120 miles (from villages Jalália in Police Station Hazro to Kani in Police Station Makhad) running parallel with the Frontier districts of Kohát and Pesháwar. The Tribal Territory is, at some parts, but a few miles from the other bank of the Indus. That river, a mighty torrent in the summer months and during the rainy season, becomes a gentle stream in winter. A raft, made of half a dozen small skin bags and a few branches of trees, is all that is required for the safe passage of some 20 men, the normal size of gangs which come over to raid the district. On a section of this frontage, about 35 miles in length,

CHAP. III, H.

Police and Jails.

Police—*contd.*

are the Kála Chitta Hills, at the foot of which the river flows. These hills, with their caves and their woods, afford an excellent hiding place for the gangs, and make the work of searching for them very difficult. There are no posts along the bank of the river, and no arrangements exist for regular patrolling there. It is therefore not surprising that the district is liable to such raids, nor that in the past such gangs have generally returned across the river unscathed.

Murders are unfortunately frequent, the motive being usually "*zan*" or "*zamin*" (lasses or land).

Mischief and arson occur but are usually not reported. The people realise that it is difficult to obtain a conviction in such cases, and take their revenge privately. Matters thus revolve in a vicious circle.

Burglaries are usually the work of local criminals.

Cattle theft has also come into prominence of late, but reports about these too are not usually lodged. The inauguration of the weekly cattle fairs, at Gondal, Hatti, Hassan Abdál, Fatehjang, Pindigheb, etc., has to a great extent, acted as an incentive. In a number of cases, reported or discovered, it was found that the thefts were timed to coincide with the holding of such fairs, and the stolen cattle were taken straight to such centres to be disposed of.

(*C*) *The old order and the new.*

Special efforts have been and are being made to reduce this crime.

In the past the commission of dacoities by Frontier raiders was considered more or less in the same light as the visit of a pestilence, something ordained by God and, therefore, inevitable. But not so now. The people are no doubt asked to "trust in God", but are also urged to "keep their powder dry." In Mr. Cowan's time an Anti-Dacoity fund was raised for the provision of fire-arms in and around Jand. In 1925 a still more detailed scheme of village defence was brought into force. It being impossible to hold the broken and rugged river frontage of about 120 miles, licenses for fire-arms were granted on a liberal scale to the villagers themselves and they were taught to be self-reliant. Attached to each license is a condition that the licensee will turn out to repel raiders within the limits of his zail. In addition, in each village a rallying point is arranged: as also the order of seniority of the licensees by whom defence is to be organised. These arrangements are in the care of the thánadár, who is encouraged to hold occasional practices.

The scheme was put to the proof when a first class raid occurred at Hassan Abdál in 1926. The scheme worked admirably well. Out of twenty-two raiders, four were killed and one wounded, the majority having been accounted for by the villagers before the Police arrived and put the gang to flight. CHAP. III, H. Police and Jails. Police—concl'd.

To reduce arson and mischief, Panchayats have been started and have dealt effectively with these sneaking crimes, the perpetrators of which are known to the village circle but cannot be convicted by legal evidence. But Panchayats can live only if the Deputy Commissioner encourages them: and when office changes hands intermittently the sap runs down.

Murder is the one class of crime which is least capable of control by Police. This has now been recognized and the village officials are made to understand their responsibility, and are ordered to report promptly cases in which there is likelihood of the breach of the peace. The subordinate Magistracy, particularly the Ilaqa Magistrates, have also been made to realize that they too have duties in this respect. All this should result in an improvement. But there ever goes on unchecked the party feeling of the villages, which has been accentuated by the elections to the Provincial Council and to the Local Bodies.

(D) *Miscellaneous.*

In the year 1927, the number of cognizable cases dealt with by the Police were as follows:—

	Reported.	*Admitted.*
Murders	58	56
Dacoities	4	1
Burglaries	179	122
Riots	42	33
Mischief	8	3
Grievous hurt	87	60
Rape	9	6
Unnatural offence	2	2
Theft of cattle	9	9
Cattle poisoning	6	6
Local and Special Laws ..	145	142

JAILS.

There is a District Jail at Campbellpur: no longer in charge of the Civil Surgeon: but under a Superintendent. From 1925—30 the cultivation of the land surrounding the Jail was greatly extended: and both vegetables and grains are grown by the prisoners.

CHAP. III, H. — Police and Jails and Education.

Jails—*concld.*

In times of emergency, as during the Akali trouble, and again during the political trouble of 1930, a Camp Jail is opened in the lower half of the Attock Fort.

Section I.—Education.

In 1907 it was recorded—

Literacy.

" Attock District is the most illiterate district in the Ráwalpindi Division. Less than 4 per cent. of the population is literate. In respect of female education the district is the most backward in the Province. Only four women in every thousand can read or write. Literacy is highest among Hindus and Sikhs, among the non-Christian population. Among Muhammadans only 2 per cent. of the males have any education, while only one woman in every thousand is literate. The ordinary *zamíndár* has no interest in education, and so far has had few opportunities."

The Education Report of 1929-30 showed a very wonderful advance.

Schools and Colleges.

There are now 990 schools in the district, attended by 43,736 scholars. Of these 442 are public schools, averaging one to every thirteen square miles—and it is to be remembered that approximately the same population covers twice the area of the adjoining district of Ráwalpindi. The schools are well graded. Every two Primary support one Lower Middle: three Lower Middle to one Upper Middle: five Upper Middle to one High School—of which there are one in each tahsíl, and a fifth, as part of the Crowning Educational glory of the district,—The Intermediate College at Campbellpur.

In 1907 4 per cent. of the people were literate: now 9·7 of the total population are at school. Then 2 per cent., now 11 per cent. of the Muhammadans are literate. Of Hindu and Sikh children cent. per cent. attend school.

Education of Girls.

As regards the education of girls the picture pleases less. Only 1·1 per cent. attend school; and whereas three-quarters of the male scholars are provided for by public schools, for girls Government provides little more than half, the actual figures being 3,213 reading in private and 3,743 in public schools.

EDUCATIONAL GRANTS AND BUILDINGS.

In 1929-30 the Government allotment was Rs. 3,08,440 and the District Board budgetted another Rs. 40,773: Government providing approximately $\frac{3}{8}$ths of the land revenue of the district. Some of the buildings are particularly good, notably the High

School at Tallagang, the Middle School at Hasan Abdál, and the Intermediate College, Campbellpur. CHAP. III, J. Education.

There are two presses, both at Campbellpur, one does English work, the other vernacular. No books are printed. Both presses are employed simply in printing occasional forms for the use of Government Offices. Native Press.

For some years "The Attock Gazette" was published monthly. It ceased to function, and a weekly paper "Ráhbar-i-Attock" has taken its place. It is not yet of importance.

Section J.—Medical.

MEDICAL INSTITUTIONS.

The Medical Department is under the general administration of the Civil Surgeon. The detail of medical institutions is :—

Provincial ..	Civil Hospital at Campbellpur : and Fatehjang, and the Jail, Police, Railway Hospital, Jand, and Itinerating Dispensary.
District Board Dispensaries.	Civil Dispensaries at Tallagang, Tamman, Adhwál, Hassan Abdál and Domel together with the rural dispensaries detailed below :—
Municipal Institutions	Hazro Josephine Hospital for Women. Hazro General Hospital. Pindigheb Dispensary.

It was in 1925 that Sir Fazl-i-Husain's scheme for the increase of rural dispensaries throughout the Punjab was initiated. The broad aim of that scheme is to provide one dispensary within every 100 square miles of territory, so that no villagers need have to go more than 5 miles to find State-provided medical help. Rural dispensaries.

At that time the number of dispensaries outside the urban area was 6 only : and the scheme contemplated a gradual increase up to 32 in all. Each rural dispensary was to cost from State funds not more than Rs. 7,000—a sum held in Simla to be sufficient to provide accommodation for 4 indoor patients, a dispensary, and residence.

The following dispensaries have already been opened :—

1926 ..	.. Makhad, Lawa, Kotsarang, Pachnand, Khunda, Bahtar, Shádikhán, Nára.
1927 ..	.. *Nil.*
1928 ..	.. Bhallarjogi, Akhori, Chhab, Chakri, Saghar.
1929 ..	.. Kamliál, Dhurnál, Sihál, Jand.

CHAP. III, J.

Medical.

Rural dispensaries —concld.

Villages selected for future development are Hajishah, Chakbeli, Chinji Malal, Miánwála, Ghurghushti. The scale of pay is Rs. 70—4—130—150—175. Great difficulty is found in obtaining qualified medical men, as the attractions of the district are as yet little understood by town-bred graduates, and its old reputation for lawlessness and inaccessibility has still to be lived down.

It will thus be seen that by the end of 1930, 7 hospitals and 23 dispensaries will be in operation all over the district.

All the dispensaries are located in their own buildings. Statement 53 in the Statistical Volume gives for each dispensary the daily average attendance. All the dispensaries have accommodation for both indoor and outdoor patients.

Campbellpur Civil Hospital.

The Civil Hospitals at Campbellpur was opened in January 1907 and the staff consists of one Assistant Surgeon, a Sub-Assistant Surgeon, Dispensers and apprentice Dispensers under training. There is accommodation for 40 indoor patients. The whole of the operation work is directly under Civil Surgeon's care. The chief operations are for cataract and stone. Contributions to this hospital are received from the District Board and the Municipal Committee.

Josephine Hospital, Hazro.

On February 14th, 1928, His Excellency Sir Malcolm Hailey, Governor of the Punjab, opened the Josephine Hospital for Women at Hazro. This was the first, and as yet the only, hospital for women in the district, and was constructed as the result of the incessant demand of the people of this district for a *purdah* hospital. Two kanals of the site, which now amounts to ⅝ths of an acre, were given by the trustees of the late Mst. Lakhshmi Devi, who left her property to be devoted to charitable purposes. When building was commenced this was all the space we had, for the land was assessed at Rs. 1,600 per kanal, and at that time there were no funds to purchase more. A design had to be found, which would give on this limited floor space a hospital, an outdoor dispensary, quarters for a Lady Doctor and her staff and also provide accommodation for Dais under training. No such suitable standard plan existed, and a new design was prepared by Mrs. M. Josephine Garbett, whose name the hospital bears. This received the blessing of the Consulting Architect to Government, Mr. B. Brentford, who drew out the plans. The hospital is uniquely beautiful. It is at present two-storeyed, but built with adequate foundations and walls, so that a third storey can be added without danger. The features of the building are the inner court-yard round which the wards are placed, the deep verandahs and the grassy plots and Fruit Garden. Special attention has been paid to

airiness, and its doors are so constructed that beds can easily be wheeled either into the shady court or into the verandahs or out on to the grassy plot. There is a tiled and completely equipped operation theatre. Within the first 6 months of the hospital's existence the number of patients coming for treatment daily averaged 225 against a maximum of approximately 145 in any of the general hospitals in the district. The building was constructed partly by a Government grant, partly by the generosity of the contractor, Thakur Bhagwan Das, who forewent all profits on the buildings, and partly by the generosity of public subscriptions, which amounted to over Rs. 20,000, more than half of which has been invested as a perpetual endowment in the Attock Central Co-operative Bank. Of the 10 beds 9 have been provided by donations of Rs. 1,000 each by different donors and bear a dedication plate. These contributions comprise the major portion of the money invested. The sum provided thereby amounts to Rs. 1,000 annually.

CHAP. III, J.

Medical.

Josephine Hospital, Hazro—concld.

Medical Budget.

The total annual recurrent Medical Budget for the whole of the district from various sources comes approximately to Rs. 2,50,000.

Lunatic and Leper Asylums.

There are no lunatic or leper asylums, and no necessity exists for them.

Private dispensaries.

The district is without any mission dispensary, but the Sardar of Kot Fateh Khan has lately added a small private dispensary for the benefit of his tenants at Kot Fateh Khan, the seat of the Sardars.

PRIVATE PRACTICE.

Medical Practitioners.

A few retired doctors have settled down in practice in some of the big towns in the district: dispensing halls are usually maintained by them, and their chief source of income would appear to be derived from the sale of proprietary drugs.

Occasionally one finds a trained dispenser earning a good living from practice and sale of medicine.

NATIVE HAKIMS.

Types of *Hakims.*

A number of *hakims,* practice privately, and there are also some quack dealers in charms and nostrums. With the exception of a few who have obtained their training and diplomas from various Tibbi Colleges, most of them belong to the categories detailed below by Captain Corry, I.M.S., Civil Surgeon, Jhelum, and taken from the Jhelum Gazetteer. It applies with equal force to this district.

" Jhelum is no exception to the general rule as regards native practitioners. They are almost all of them men without any

CHAP. III, J. — Medical. — Types of Hakims—contd.

diploma from a recognised school. There are five different types :—

(1) So-called *hakims*, who belong to the family of *hakims* and have learnt the art either from their fathers or from others of their class. They are taught medicine after a preliminary study of Urdu and Persian, and practice it first under the supervision of their teachers and only afterwards independently.

(2) Common druggists, or dealers in indigenous drugs. These persons first open a shop and deal only in drugs. Presently they begin to treat patients by using the prescriptions which are sent to them by the *hakims*. They also read two well known books in Urdu and Punjabi named *Dár-ul-shafa* and *Khair-munukh*, which contain the symptoms and signs given in the form of poetry. Gradually they sign their name as *hakím* so-and-so, and paint the word *hakím* on their signboard. Their knowledge is very superficial, and, apart from a certain empirical skill, they are totally unacquainted with scientific methods.

(3) *Vaids*: of these there are very few in the district. They chiefly use herbs and metallic oxides called *kushtas*.

(4) *Sanyásís*: these are chiefly Hindu *faqírs*, who go from place to place treating venereal diseases, impotence, sterility and phthisis. They use very dangerous drugs such as arsenic and mercury, rarely gold chloride and occasionally herbs. Their chief places of resort are Tilla and Kitás where they assemble in large numbers from various parts of the country at the *Baisákhí* fair. Many people come to these places to find some good *Sanyásí*, and either take him to their homes or get medicine from him. To the same class belong the alchemists who are believed to have the power to turn copper into gold and tin into silver, though the number of those who can really bring about a change is a fact which even those who believe in the possibility of this metallic transformation are in doubt.

(5) *Maulvís*, or preachers in mosques: these also practice medicine. In old days instruction in certain medical books used to be given to *Maulvís*, as part of their Arabic course. The practice, though now less in

CHAP. III J.

Medical.

Types of *Hakims* —concld.

vogue, is not yet extinct, and every now and then one does meet a *maulví* who has got a fair knowledge of the *Unání* medicine. Some of them even know how to do venesection.

These are the five chief groups of native practitioners in the art of healing. Those who practise surgery may also be briefly described. First among these is the common barber. To a superficial observer he only appears as a trimmer of the cuticular appendages, but to one who knows him more fully he is also a surgeon. He can pull out a tooth with his crude *zambúr* (forceps), open an abscess, bleed for pneumonia, and perform scarification with his ever ready razor. Many a time he may be seen holding the forehead of a village boy on his knee and scarifying the nape of his neck, showing the black venous blood to the anxious mother as a proof that he has touched the diseased spot. Some of them treat ulcers, generally using copper sulphate and wax as the basis of their ointments.

Next to him comes the well known wrestler or *Pahlwán*, whose sole business is to set fractures or reduce dislocations. In the village this duty often falls to the common weaver who is believed to be an expert in his art. Bone-setting is effected by extension and counter-extension. To keep the broken ends in place a very dangerous procedure is adopted. A paste is made containing yolk of eggs, coriander powder, and some herbs called *maidásak* and *sajji*. This is painted over the broken part, pieces of bamboo stick are placed on it lengthwise, and over this another coating of the same stuff. The rule, or rather I should say the misrule, is to bandage tightly. Very often such patients are brought to the hospital with limbs either gangrenous from obstructed circulation or verging on mortification, and it falls to the lot of not a few of us either to amputate or perform some less serious operation. Reduction of dislocations is always preceded by rubbing with sweet oil followed by manipulation. The patient is told to lie passive, and the operation continues for several days.

Native Surgery.

The third specialist in surgery is the much reputed *Ráwal*. His chief, or rather sole, practice is Ophthalmic Surgery. Many of us must have seen the spoiled eyes of patients who come to hospital for cataract extraction. He does not take the lens out, but simply pushes it back into the vitreous, and after getting his fee, bandaging the eye, and making the patient count fingers, quietly makes away giving directions that the eye is not to be opened for three days—time enough for him to be out of reach. Two places in this district are the headquarters of *Ráwals*, whence they

CHAP. III, J. — Medical. — Native Surgery—concld.

go forth to distant countries, including even Africa and Central Asia. These are Mohra Kor Chashm and Sháhán-ki-Dheri, both in the Chakwál Tahsil. But his services are less and less in demand as, like the use of quinine, cataract extraction have now taken a well deserved hold on the popular mind.

Next comes the common sweeper, who hawks in the street for leech application: and mention must also be made of the women who come to cup patients with the hollow horns of certain animals. These latter place the horn on the part affected, suck air out of it by placing their mouth on the thin end and then keep it applied till the proper effect is produced. Under this head mention must also be made of the specialists in circumcision. They are commonly barbers, but only those of experience attempt the operation. The principle is the same as our own, only no sutures are used. The mucous membrane covering the glans is forcibly pushed back. Bleeding is controlled by fine cow-dung which is dusted on the part, and an ointment is smeared over the wound. Water dressing is applied, if swelling appears.

Another class of practitioners are known as *Jaráhs*. They go about from place to place with a small round box containing their instruments and dressings. They can remove necrosed bones by forceps and can dress various kinds of wounds and ulcers.

These different groups having been described, a few examples may be cited to show how the *hakims* treat the more common complaints.

Treatment of common complaints.

(1) **Fever**: this they say is the result of a certain poison in the blood. They give it several names, but the treatment is much the same in each case. In acute fevers, even when the temperature is very high, they will never put anything cold on the head, saying that this treatment causes brain fever. Milk they do not prescribe, alleging that it contains fat and that fat is injurious during fever. The principle is to deplete the system and give vegetables and pulses. For chronic fevers they now allow milk and soup, perhaps from seeing us prescribe this diet without hesitation. For thirst they advise *sharbats* of tamarind and prune and *arq gaozabán*. As regards the use of purgatives, they sometimes refuse them at the start, but generally permit them after some days. (2) **Pneumonia**: venesection is the rule with old *hakims*. Food is the same as in ordinary fever, but opium is seldom permitted. (3) **Plague**: tonics for the heart and caustics for the *bubo* are generally prescribed. (4) **Dysentery**: purgatives and mucilaginous and demulcent drinks made from such drugs as *isafgul* (*Plantaga ovata*) are prescribed, when it is thought to be due to *seybulæ*; otherwise stringents like ginger, bael fruit or mango-seed. (5) **Cholera** is

Treatment of common complaints—*contd.*

believed to be the result of bad air. The treatment for this disease is eliminative in nature at the beginning, and the drugs prescribed are nutmeg and cloves during the cold stage, tonics for the heart, opium, red pepper and *asafœtida* for controlling diarrhœa when excessive, ginger and sweet oil for rubbing on the body, with *khichri* (*dál* and rice) for food. Gram water is also given, and rice water to allay thirst. (6) **Small-pox** is thought popularly to be the manifestation of a goddess " Mata Devi ". It is believed to be due to the menstrual blood, which is sucked in by the child *in utero.* In cold climates this material is destroyed. Very white people and albinos escape. The treatment adopted is intended to cleanse the blood ; *ludhrák* is given after rubbing it up in rosewater, and pearls applied externally in the form of powder. Milk is given along with *munakka* to bring the pocks out. When the disease matures roasted gram is given to cause desiccation. (7) **Tonsilitis** : the treatment is as follows :—Gargles of the pulp of *cassia fistula* boiled in milk, leeches externally, and *sharbat* of mulberry internally. The abscess is generally opened by the barber. (8) **Gravel** : the treatment prescribed is directed to promote fulmination, hot fomentation of poppy-heads or *khash-khash,* hot affusion on the kidneys, baths, *sang-i-yahúd* and *jau khár* to dissolve the stone. Meat is avoided. (9) **Gout** : the cause is thought to be phlegm and wind in the system. Purgatives are first prescribed, afterwards ginger or *iárámírá* or *harmal* taken internally ; locally oils of the same drugs are employed. Milk is avoided, meat and *dál* recommended. Rice is not prohibited. (10) **Syphilis** : mercury and arsenic are the chief drugs employed, with *sarsaparilla, chiraetta, papra* and *unáb* internally as blood purifiers. For local use *cachu múrdásang* and burnt *kauri* shell are recommended. Salivation is thought to be highly beneficial, as it is believed that after this process the poison is not transmitted to offspring, and sweating is similarly regarded. (11) **Dropsy** : three kinds are commonly distinguished—(*a*) Windy (*tabbi*) or *tympanitis,* (*b*) *lehmi* or general *anasarca,* (*c*) *zakki* or *ascites.* The disease is attributed to liver and stomach troubles. The principles of treatment may be summarised as follows :—Purgatives like camel's milk, milk of euphorbiaceous plants, rhubarb solution, *arq* of *kainch mainch* (*mako*). Diaphoresis is effected by placing the patients in a hot oven. Hot baths and diuretics such as anise and *kásní arqs* are also enjoined. Cures can be effected in the initial stages of the disease, but not later on. (12) **Phthisis** : a distinction is made between consumption, called *tap diq,* in which there is no hæmoptysis, and *sil* in which there is hæmoptysis. Four stages are observed. First the fever stage ; secondly, disorders of the internal organs; thirdly the cough stage ; and, fourthly, that of diarrhœa. The first two stages are curable,

CHAP. III, J. — Medical. — Treatment of common complaints—*concld.*

the third only rarely and fourth never. Cold and *tar* things like camphor, *arq* of milk, pearls and other tonics, barley-water, gram soup, dried turnips and soups made from birds are generally prescribed. Opium is not usually permitted.

Before closing this note a few points about the popular ideas of treatment would not be devoid of interet :—

Popular methods of treatment.

" Cauterisation is the common treatment for enlarged spleen, sciatica and deep-seated pains.

For malarial fevers, to check the paroxysms a sort of charm is written on a leaf, commonly of *banyán*, and the patient is told to look at it till the attack is past.

For neuralgia also a charm is written on a piece of paper which is doubled, and then hung over the eyebrow or other place affected. It is supposed that this expedient will effect a cure.

For meningitis hot bread is bandaged on the head.

Ram's fat from the tail end is plastered on the head in cases of tetanus.

In cases of general weakness nutmeg and almonds are prescribed as stimulants.

Demons are thought to be the cause of many obscure complaints, especially those attended by hysteria in any form. To wash the face of sick persons and especially to clean the eyes of children, when they are suffering from any sort of eye complaint, is strictly forbidden. Cow-dung poultices are always the first step towards hastening maturity in an abscess. Milk and *ghi* are often taken by persons who suffer from stone in the bladder for their supposed anodyne and diuretic. Villagers frequently visit the tombs of saints before undergoing any serious operations. This is especially the case with chronic rheumatism and sufferers from neuralgia. Ventilation is not at all favoured as a means to health. Putting bed covering over the patient's face, surrounding him with numbers of friends, burning charcoal in the same room, all these are expedients, the efficiency of which it requires tact and persuasion to prove futile. Every food stuff is believed to possess qualities either of heat, cold, dryness, or moisture, or a combination of these four properties : and, when a medicine is prescribed, the mother will invariably ask whether it be hot or cold, etc.

English medicines are generally believed to be hot and dry in their effects."

THE HEALTH DEPARTMENT.

CHAP. III, J.

Medical.

The Health Department is presided over by the District Medical Officer of Health who is also responsible for the vaccination in the district, outside the areas under the Municipal Committees at Campbellpur, Hazro and Pindigheb. He is assisted by a Sanitary Inspector and vaccination staff, consisting of a Superintendent of Vaccination and 10 vaccinators who travel about the district. The cost is met by the various bodies. There is a Lady Health visitor in Campbellpur: and one at Hazro: and there is a Model Infant Welfare Centre at Saman, the generous gift of Shaikh Fateh Khan, Shaikh Ahmad Khan and their other brothers. This centre follows a design worked out on the spot in consultation with Miss Simon, and provides quarters for a Lady Health visitor, and her servant: and also for two Dais in training, as well as a centre and spacious play-ground. There is a *purdah* wall surrounding the whole. The Dispensary, a gift to the Board of the same individuals, adjoins it. It is on the model of the rural dispensaries, but of superior finish.

CHAPTER IV.—PLACES OF INTEREST.

Attock Fort.

CHAP. IV.

Places of interest.

In 1561 Akbar the Great firmly held the Punjab ; but the Province of Kabul, which then extended to the Indus, was governed in practical independence by the guardians of his younger half-brother Mirza Muhammad Hakim, a feeble drunkard.

In 1580 there broke out a rebellion consequent upon the favour shown by Akbar to Jesuit Missionaries, which aimed at replacing Akbar by Mirza Muhammad Hakim. The latter supported the movement by an invasion of the Punjab.

Akbar marched against his half-brother, who fled, and in August 1581 Akbar entered Kabul. He was back in Delhi on 1st December. While on his return march from Kabul he ordered Attock Fort to be built to assist in guarding against future trouble from Afghánistán.

This campaign is described in detail by a Portuguese Jesuit, Father Antonic Montserrate, who accompanied the expedition.

The Fort took two years and two months to build. Akbar gave it the name of *Attak Banaras* in contradistinction to that of *Katak Banaras*, the chief Fort at the other extremity of his Empire. A tablet commemorating the foundation of the fort is now over the old Lahore Gate.

The original position of the tablet is supposed to have been elsewhere.

At the same time Akbar established the ferry, and imported a colony of boatmen from Hindustán, the descendants of whom still live in *Mallah-i-Tolah* ; and still receive the *jágír* which he allotted to them.

In 1812 Ranjít Singh, the Sikh ruler, surreptitiously seized the Fort from the Wazír of Kabul. The Fort remained nominally in the hands of the Sikhs until the end of the first Sikh War (1846). Its actual occupation by Sikh troops lasted for only 10 years.

As a result of the first Sikh War, the fort was occupied by the British.

When in 1848 the second Sikh War broke out, it was attacked by the rebels, and, though gallantly defended by Lieutenant Herbert, they succeeded in capturing it. With Herbert was captured Saadullah Khan, of Saman, and in reward for his fidelity, he and his eldest son were granted an *inám* and *muáfi* in perpetuity, The Fort was re-captured by the British at the end of the War

CHAP. IV — Places of interest.

and has been in our hands ever since. Its normal garrison up to 1904 appears to have been a Company of British Infantry, and a British Battery or section. From 1904 until 1914 Indian troops and British gunners occupied it, the latter being withdrawn when the Great War broke out. In 1917—19 the garrison was a Company of British Infantry. Since then it has been a Company of Indian troops relieved every two months.

Interior of the Fort.

The present buildings in the Fort have been erected on the top of older ones. To most of the latter it is no longer possible to gain access.

(1) The Walls.

The walls are over a mile in circumference. Inside them runs a gallery; while below the gallery and also in the towers are a number of guard rooms.

(2) The Quarter Guard.

Until recent times the Quarter-Guard occupied the large guard room by the Delhi Gate.

(3) The Canning Battery.

The Canning Battery is in the upper Fort, and has seven gun emplacements. The date of its erection is not known.

(4) The Mughal Hammam.

The entrance to the Mughal "Hammam" (Turkish Bath) is near the Delhi Gate which connects the upper and the lower forts. The Hammam is still in a good state of preservation. It contains a large 'auditorium' or lounge, and various smaller rooms which were used as Calidária, Tepidária, and Frigídaria. In the walls of these rooms may be seen the places where the water was prepared. The floor is hollow to allow the passage of hot air. At the bottom of the steps leading down into the "Hammam" is the entrance to a tunnel. This tunnel ordinarily led to the old Lahore Gate. It is now blocked at a point about 30 yards beyond its entrance.

(5) The Powder Magazine.

The Powder Magazine was constructed in 1857 in the barbacan of the old Lahore Gate. It cost Rs. 18,112 to build.

(6) The old Lahore Gate.

North of the 'Hammam' is the barbacan of the old Lahore Gate. The powder magazine, which this barbacan now contains, was constructed by the British. The upper portion of the old gate is immediately above the magazine. In it is set the foundation tablet. The inscription is in Persian and Arabic—and reads as follows :—

"Supar Sháhhán-i-Álam Sháh Akbar

Alláh Ta' álu Shanáhu Alláhu Akbar—991."

The translation is :—

Greatest of the Kings of the Earth is the King Akbar
Allah increase his glory: Allah is Greatest.
(Akbar) (*i.e.*, 1581 A. D.).

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There is a play on the word "Akbar" which means "Greatest." The lower portion of the old Lahore Gate can be seen inside the magazine. It leads into a large room of Moghal origin, which is still in a good state of preservation.

(7) Treasure.

It is said that much treasure has been found in the Fort at various times, chiefly in the neighbourhood of the old bazaar. Coins have been found there dating from the time of Akbar.

(8) The lower Fort.

Passing through the Delhi Gate one enters the lower Fort. Here the road from the new Lahore Gate bifurcates. One branch of it—the sunken road—passes through the old bazaar and leads to the Clyde Battery and the Water Gate.

The other branch was at one time part of the Grand Trunk Road and is still a right of way. It leads to the Mullahi-Tolah Gate.

(9) The Water Gate.

The Water Gate enclosure is reached by a spiral staircase leading down from the Clyde Battery. This enclosure used to contain a 'Tank' which was the chief water-supply of the fort. The existing well is modern.

(10) The Old Mullahi-tolah Gate.

South-east of the Water-Gate is the old Mullahi-Tolah Gate. The outer exit is now blocked up ; but the inner gate is in its original state, and is one of the chief 'sights' of the Fort. Its architecture is very similar to that of the old Lahore Gate.

The Sarai.

The Sarai is a protected monument. It was built during the reign of the Mughal Emperor Jahangir.

The villagers believe that there was once a tunnel under the river, leading from the Sarai to the tower on the opposite bank. This tunnel, it is said, was blocked by a large stone. A Pioneer Officer, although warned of the danger by the villagers, had this stone removed in order to clear the tunnel. The water came in, flooding the tunnel and drowning the men (Mazhbi Sikhs) at work in it. There is, however, no authenticity for this story, and the experts say that no such tunnel ever existed.

The Ferry.

The ferry operates between Mullahi-Tolah and Khairabád. The crossing is dangerous on account of whirlpool formed by the junction of the Kabúl River with the Indus. Below the junction on the right bank are two rocks known by the names of Kámália and Jalália, which, jutting into the river, render the passage still more dangerous. Boats are not infrequently dashed against them. Kamália is directly opposite the Water Gate, Jalália a few hundred yards further down. The name are derived from Kamál-ud-Din and Jalál-ud-Din, sons of the founder of the Roshnai sect, who were flung from these rocks for adherence to their father's heresy during the reign of Akbar.

CHAP. IV.

Places of interest.

Old Military Cantonment. Attock bridge.

In 1908 there was a military cantonment just north of the Attock Railway Station (known as Thandi Bhir).

Prior to 1883 the Indus was crossed by a boat bridge between the Sarai and the village of Khairábad. The pillars of this bridge are still visible. The North-Western Railway used to run through the village of Attock.

For technical reasons it was decided to carry the railway further south. The construction of the present bridge was begun in 1880 and completed in 1883. It is 500 yards long.

BAOTI PIND.

Báoti Pind.

On leaving the Nágar fountain, Huien Tsiang proceeded about five miles to the south-east, to a gorge between two mountains, where there was a *stupa* built by Asoka, about 100 feet in height. This was the place where Sakya Buddha was said to have predicted the period when the future Maitreya Buddha should appear; besides the *stupa* there was a monastery which had been in ruins for a long time. The distance points to the neighbourhood of Báoti Pind, where are the ruins of a large town and of several Buddhist monuments. But the bearing is east, which it certainly should be, as a south-east direction would have carried the pilgrim far away from the hills into the open plain about half way to Kála-ká-Sarái. Báoti Pind is a small village situated on an ancient mound, or *pind*, on the right bank of the Báoti or Boti nullah, and at the west end of a rocky hill which stretches as far as the Haro river. In the gorge between the Báoti ridge and the Hasan Abdál ridge, there is a small hill forming three sides of a square which is usually called Langarkot, but is also known as Srikot. This was the name of the fort, which was formed by closing the open side of the hill with a strong wall. The north side is about 1,500 feet in length, and each of the other three sides about 2,000 feet, which would make the whole circuit of the place just one mile and-a-half. The remains of numerous buildings and tanks are traceable in the lower part of the fort, and of the walls and towers along the crests of the ridge. The hill is everywhere very rocky, but on the north and east sides it is precipitous and inaccessible. The highest point of the ridge is at the north-east angle, which is about 300 feet above the fields. On this point there are the remains of a large *stupa*, which is visible for many miles all round.

This, however, is not the Maitreya *stupa* of Asoka, as a deposit excavated from its centre by General Cunningham was found to contain a gold coin of about A. D. 500 or 600, which is of

CHAP. IV. — Places of interest. Báoti Pind—concld.

very common occurrence in the Punjab and N.-W. India. The other objects were a small flat circle of gold, with a bead drop in the middle, a minute silver coin much worn, some small coloured beads, and some fragments of bone. The state of this deposit showed that it had never been disturbed, and the presence of the gold-coin therefore proves that the *stupa* is not older than A. D. 500, and cannot be the famous *stupa* of Asoka. The ancient coins, however, which are found among the ruins in considerable numbers, show that the place must have been inhabited long before the time of Asoka, and the natural advantages which the site possesses in its never-failing springs of water are so great that there can be little doubt that the position must have been occupied from the very earliest time, and General Cunningham has little or no doubt as to the identification of the ruins as the site visited by Huien Tsiang, even though it is now impossible to ascertain which of the ruined *stupas* is the right one. The name of Báoti Pind is most probably, General Cunningham thinks, a modern one, but that of Langarkot an old one. The people have no tradition about the place, except that the fort had belonged to Raja Sirkap, the antagonist of Rasálu, whose name is associated with all the old cities in the Sindh-Ságar Doab.

No excavations have been carried out at Báoti Pind.

Campbellpur.

The town of Campbellpur is divided from Cantonments by Civil Lines. It is an excellent example of good modern buildings : well drained : well watered : with good vistas. There is an Agricultural Farm, the site for which was purchased at great cost in the summer of 1927, and where science is still wrestling with the problems that have defeated the *zamindár*.

The Chhachh.

" The northern portion of the district, now known as Chhachh from its geographical position, is associated with much of great interest in the history of India. This tract of Chhachh has been identified by General Cunningham and Sir Aurel Stein (*Indian Antiquary*, 1896, page 174) with Chuksha mentioned in the Taxila (now London Royal Asiatic Society's) copper plate of Patika of the year 78. According to the latest reading by Dr. Sten Konow (*Acta Orientalia*, volume 3, page 58) this inscription states that in the year 78, on the 5th day of the month of Panemaios, a corporeal relic of the Lord Sákyamuni, which was formerly unestablished, has now been established and a *Sangháráma* erected at a place called Chhema (Kshema) to the north-east of the City of Taxila (*by*) Patika, son of Liaka Kusulaa, Chhatrapa of Chhahara and Chuksha, under the great King, the Great Moga. It will be seen that Chhahara and Chuksha were in the 1st century

B. C. included in the Kingdom of Taxila and probably formed part of it for centuries before and after this date. A fairly complete history of Taxila has, as stated above, been reconstructed with the help of inscriptions and numerous coins discovered by archæological excavations, and it may be assumed that the various dynasties from the Indo-Greeks down to the Kushans that ruled over Taxila, also claimed sway over the region of Chuksha, modern Chhachh." **CHAP. IV.** — **Places of interest.** Chhachh—*concld.*

Hasan Abdál lies on the Grand Trunk Road, 20 miles east of Campbellpur, and is famous for a tank now held sacred by the Sikhs as well as the Musalmáns. General Cunningham identified this tank with the tank of the Nágarája Elápatra mentioned by the Chinese Pilgrim Huen Tsiang, and several large mounds at Hasan Abdál testify to its having been the site of an important Buddhist settlement in ancient times. The most important of these mounds is a large and lofty one, about 20 feet high on its north face, but 50 feet on the south. On this mound General Cunningham traced the remains of a large monastery and a *stupa.* On another mound, 800 feet to the east of these ruins, he discovered the foundation walls of a large square temple and the remains of yet another temple on a third mound. None of these remains have yet been explored, but when they are, they may be expected to throw useful light on the ancient history of this interesting site. Hasan Abdál.

To the modern visitor there are five objects of interest: the "Panja Sahib," a huge Gurdwara enclosing the stone said to bear the impress of Guru Nának's hand : the mosque, now being rebuilt, which faces it, and in which Bába Wali Kandhári is said to have fasted for forty days : the adjoining tank in which mahseer up to five or six pounds feed in undisturbed peace : the garden beyond, cared for by the Archæological Department, by some said to contain a Lala Rookh, by another tradition the body of one of Akbar's wives: and, lastly, the shrine of Bába Wali on the top of the rugged hill, a stiff climb unless attacked from the south.

The story of Guru Nának and the stone is related somewhat differently by Moorcroft and by General Cunningham. According to Moorcroft the block of stone from which the holy spring gushes forth, is "supposed to have been sanctified by a miracle wrought there by Nának, the founder of the Sikh faith. Nának, coming to the place fatigued and thirsty, thought he had a claim upon the hospitality of his brother ascetic, and invoked the spirit of Bába

CHAP. IV. — Places of interest. Hasan Abdál —contd.

Wali for a cup of water. The Muhammadan saint, indignant at the presumption of an unbeliever, replied to his application by throwing a stone at him of several tons weight. Nának caught the missile in his hand and then placed it on the ground leaving the impressions of his fingers upon its hard substance. At the same time he commanded water to flow from it, and this constituted the rill here observable." It is from this story that the place has received the Sikh name of "Panja Sáhib," or the holy "hand-mark" of Nának.

General Cunningham relates the following curious version of the legend as told to him by a Sikh Faqír :—

"Janak Rája had two servants, named Moti Rám and Nának. On the occasion of a particular sacrifice the Rája appointed separate duties to each of his servants, and amongst them Moti Rám was appointed to keep the door, and Nának to remove the leaves in which the food had been wrapped. During the ceremony a dog rushed in through the door towards the Rája. Moti Rám followed the dog and broke its back with a stick, when he was severely reproved by Nának for his cruelty. Rája Janak then addressed his two servants saying, 'Moti Rám you have behaved as a Malechh, but you, Nának, as a man full of compassion. In the Kal-jug you will both be born again ; Nának in Kálu Khatri's house in Talwandi, and Moti Rám as Wali in the house of a Mughal in Kandhár. When Baba Nának was reborn, he went to Wali's house in Kandhar, and said, 'Do you remember me?' 'No,' said Wali, 'but do you open my eyes.' Then Nának opened the eyes of Wali, and he saw and remembered his former birth, and fell at the feet of his former companion. Nának then turned Wali into wind and himself into water, and they both came to the town of Haro, which is now called Hasan Abdál, where Nának placed his hand on the rock, and they resumed their shapes. But ever since then the pure water has never ceased gushing forth from the rock, and the pleasant breeze has never ceased playing about the town of Haro."

In this form of the story General Cunningham recognizes a genuine Buddhist legend, which may be almost completely restored to its early form by substituting the name of Buddha for that of Nának, and the name of the Naga King, Elápatra, for that of Moti Rám. As to the hand-mark upon Bába Nának's stone, an explanation amusingly suggestive of Scott's Antiquary is given by Mr. Delmerick. The story told by many, even devout Sikhs being among the number, is that one Kamma, a Muhammadan mason, cut the mark upon the stone for his own amusement, and that on one occasion during the reign of

CHAP. IV. — Places of interest. Hasan Abdal —concld.

Ranjít Singh, when a raid was made upon the village of Hasan Abdál by a body of Sikhs, all fled except one Naju, a *fakir*, who in order to save himself, boldly declared that he was one of Bába Nának's *fakirs*. Asked how he came to know of Baba Nának, he invented the fable of the saint's miracle and appealed in proof to the hand-print on the stone. The Sikhs believed him, and set up the stone. Many highly respectable residents of the town admit that before Ranjít Singh's time there was no shrine or place of Hndu worship at Hasan Abdál.

The shrine at the top of the hill is said to be in memory of Bába Wali Kandhári, an ascetic, who fasted for forty days in a cell attached to the new ruined mosque opposite the Gurdwara. It is lighted every Thursday evening. He is generally identified with Hasan Abdál: but according to the information collected by General Cunningham, Bába Wali Kandhári was a saint from Kandhár, whose ' Ziárat ' or shrine is on the top of the hill, while Hasan, surnamed Abdál, or the mad, was a Gujar, who built the Sarái which still goes by his name, and whose tomb is at the foot of the hill."

Hazro.

Hazro is a pretty little town of between 8,000 and 9,000 inhabitants, half Pathán, half Hindu, situated in the middle of the fertile Chhachh valley lying between the Indus and the dry ravines and desolate sand-hills of the Campbellpur plain. Its white mosques and spires, relieved by occasional palm trees rising from the midst of waving fields, are visible from a great distance. The scene of the great battle in which, in A. D. 1008, Sultán Mahmúd Ghaznavi defeated the united forces of the Rájás of Hindustán and the infidels of the Punjab with a slaughter of 20,000 men, it was afterwards fixed upon by some of the Pathán followers of that chieftain to be the site of their colony. Frequently looted in the unsettled times prior to British rule by Pathán marauders from the neighbouring hills and from beyond the Indus, it never attained any position beyond that of a large village, but has now greatly increased in size and prosperity. Grains of all kinds are collected from the rich country round about, and traders bring their wares from Yusafzai and the neighbouring independent territory. An excellent quality of snuff is manufactured in large quantities. All these goods are exported in exchange for European piece-goods, indigo, etc. The town is nearly surrounded by a wall, and the *bázárs* are neat and clean. Of public buildings, there are a police station, good school-house, dispensary and a Municipal Committee house, which is occasionally used as a court. The Josephine Hospital for women is a striking structure.

CHAP. IV.

Places of interest.

Kalar.

Some twelve miles east of the junction of the Soán with the Indus, between Makhad and Kálábagh, and about three miles due south of the village of Shah Muhammad Wálí in the north-west corner of the district, is an old temple called Kalar or Sassi da Kallara, which has hitherto escaped notice. It is situated at a height of about 1,100 feet above sea-level, on the edge of a hillock rising steeply from the bank of the Kas Letí, one of the torrents, tributary to the Soán stream, which descend from the northern face of the Salt Range; it here passes through a rough tract of hillocks and ravines. The temple is in a ruinous condition, due largely to the gradual wearing away of the soft sandstone hillside on the edge of which it stands, and its further decay will probably be rapid.

A few of the principal measurements are as follows:—exterior: extreme length, including portico, 22½ feet; extreme breadth, 16 feet; height 23½ feet, excluding the pile of bricks on one corner. Interior: the temple is a square of 7¼ feet and the portico had apparently almost the same floor measurements. Height from floor of temple to top of dome, 14¼ feet; to top of upper chamber, including the thickness of the beams above it, 18¼ feet.

The temple is built of large bricks, two inches thick, varying in length from 15½ to 17 inches or more, and in breadth from 10 to 10½ inches. On the outer walls these bricks are elaborately carved in decorative designs of a simple character.

Within the temple (which was reached through a portico divided from it by a short passage), at a height of 7 feet from the floor, is a band of ornamentation 8 inches deep, repeating part of that on the outer walls. The interior of the temple and portico is otherwise plain; it shows signs of having been once plastered.

Ten feet from the floor the corners are filled with six courses of overlapping bricks, which gradually reduce the opening to a circle. Above come thirteen courses, nine laid flat and the last four on their edges; these form a dome ending in a small hole, of which the covering is no longer in place, the dome being otherwise intact.

Above the dome is the roughly laid brick flooring of a small upper chamber, only 3½ feet high, of the roof of which a few weather-worn beams still remain in place. Everything, practically, above this has disappeared. On one corner stands a rough pile of bricks, about 5 feet high, but this was evidently no part of the original building.

CHAP. IV.

Places of interest.

Kalar—*contd.*

The temple faces due east, commanding a wide view in that direction as well as to the north. Immediately in front is the steep slope of the hill, which has evidently lost much by erosion since the temple was built. One side of the portico has been completely undermined, and has fallen, carrying with it the roof of the porch; the slope below is covered with their *débris*.

In the graveyard of Shah Muhammad Wálí stands a block of *kaniat* (tuffa) stone, 12 by 8 inches in section; part is buried in the ground, but its length seems to be about 5 feet, and it is only part of the original block. This stone is said to have stood erect in the centre of the portico entrance of the Kalar temple; when the portico collapsed the stone went with it down the hill, and this, one of the pieces into which it was broken, was eventually carried off by a man of Sháh Muhammad Wálí for use in building a house. He fell ill and died soon afterwards, and the villagers, ascribing his fate to the anger of the spirits guarding the temple, disposed of the stone by using it as his gravestone. The block is merely a rough-hewn slab, and can hardly have been used as a pillar as is stated; it was more probably the sill across the entrance of the portico.

There is now no sign of image or pedestal of any kind in the temple; but the floor is choked with a mass of rubbish, which has not been cleared out. Partial excavation, to ascertain the level of the floor, yielded nothing of interest.

Close to the walls of the building was found a coin of Venka Deva, whose reign is placed by Cunningham in the last part of the 8th century A.D.

The whole of the flat top of the hill on which the temple stands, about an acre in extent, is covered with the ruins of houses, built apparently as village houses are now, of rough blocks of sandstone in mud, without mortar. The nearest existing village is that of Sháh Muhammad Wálí, three miles away; adjoining it is a low mound of some size, covered with broken pottery. This site called Kalrí, is certainly a very old one, and may have had some connection with the Kalar temple, but nothing has been found to show its date.

Of the origin of these places nothing is known locally. In the popular mind the Kalar temple, otherwise Sassí dá Kallara or Sassí dí Dhaular, is connected with the well-known folk-tale of Sassi, the king's daughter, and Punnun, the camel-driver of Mekrán; but it may safely be said that the building has nothing to do with this popular story, and that the connection was suggested merely by its name.

CHAP. IV.

Places of interest.

Kalar—concld.

Photographs of the temple were sent to Dr. M. A. Stein, who writes as follows: "In style the temple closely resembles two small shrines standing amidst the ruins of Amb, Sháhpur District, but these are of a kind of tuffa stone. I do not think the details visible in the photographs permit a close dating, but seventh to ninth century of our era would probably be an approximate date. The large size of the bricks points to the earlier limit. * * * * It is evident from the general look of the structure that it was a Hindu temple. Closer examination of the cella might show whether it was dedicated to Shiva or Vishnu."

On the materials available no more definite conclusion as to the date of the temple appears to be possible. Dr. Stein refers to the small shrines at Amb. In style of ornamentation, as well as in general arrangement, their resemblance to the Kalar temple is striking, and it can hardly be doubted that their date is approximately the same. Of these Amb temples, which lie about fifty miles due south from Kalar, Cunningham writes that they "are all of the Kashmirian style, but almost certainly of late date, as all the arches have cinquefoil instead of trefoil heads, which is the only form in Kashmir. I think, therefore, that their most probable date is from 800 to 950 A.D." (At Kalar there is no arch remaining.)

The temple also much resembles the five small temples at Kafir Kot (about sixty miles to the south-east) described in Archæological Reports, xiv, 26—28.

Kot.

Kot is the seat of the Chief Gheba family. It lies on the Fatehjang-Kálábágh road. The village itself is of no importance apart from the residence of the Gheba Sardar: the shrine of Báwa (*alias* Bhái) Than Singh, a saint of great reputation: and a very handsome mosque visible at a great distance. A mile away are the ruins of the fort of Pagh where Rai Muhammad Khan was murdered by the Malláls.

Maira.

The country to the north of the Salt Range contains but few remains of archæological interest: there is an old Buddhist well at Maira, a village at the foot of the range, which has been described by Cunningham at page 93-94, Vol. V, Archæological Survey Reports. The well is square-mouthed for the topmost 10 feet, and contained Kharoshthi inscriptions on three sides, of which the report gave several versions in plate XXVIII accompanying it. Cunningham thought he made out, almost certainly, the date, Samvat 58, but that nothing more could be made out,

until the inscriptions were removed from the well and cleaned: two of them were so removed by Mr. J. P. Rawlins of the Punjab Police, and are now in the Lahore Museum: they are dealt with by Dr. Führer in the Progress Report of the Archæological Section, North-West Provinces and Oudh, for 1897-98; but unfortunately the only portion readable with certainty proved to be the word Sramanera, or "Buddhist lay brother." The third inscription, it is presumed, remains in the well.

There is another small square-topped well about 8 miles south-east of this, close to the village of Qádirpur, in the Tallagang Tahsíl, which is also probably very old: the people there say that it was not constructed in their time, or the time of their immediate predecessors, but was brought to light by a villager ploughing his fields a good many years ago, having been previously covered. It has no inscriptions.

Pindigheb.

Pindigheb, the head-quarters of the tahsíl of that name, is situated on the south bank of the Síl. It is the ancestral seat of the Jodhra Maliks of Pindigheb, by whom it was founded. It is the only place of any size in the tahsíl, and situated as it is in a very wild tract, it presents a pleasing appearance to the eye by contrast with its surroundings. There are a good many trees studded about, and, as water is near the surface, there are many vegetable gardens and plantain trees, which make it look like an oasis in the white sand of the stream which lies on one side of it. In the town itself, which has a good *bázár*, and is well paved, the prominent buildings are the houses of the Nawáb and his family. Just outside are the court and residence of the Sub-Divisional Officer, and the Rest House, good modern buildings.

Tallagang.

Tallagang is the head-quarters of a tahsíl, situated in the southern portion of the district, latitude 72° 28′; longitude 32° 56′. Population about 7,000.

The town is an unpretentious collection of native houses without any buildings of importance. It has an interesting *bázár*, a grain market, a police station, school house, dispensary and a circuit bungalow; the latter is a well-built and lofty building, with ample accommodation.

A Small Town Committee endeavours to control local affairs.

There was also a cantonment at Tallagang for some years, but in 1882 it was finally abolished.

CHAP. IV.

Places of interest.

Talagang—concld.

The town was founded by a chief of the Awán tribe some 260 years ago, and, since its foundation, has been the seat of administration of the neighbourhood, at first under the Awáns, then under the Sikhs, and now under British rule. It possesses some commercial importance as a local centre of trade: the town is healthily situated in a dry plateau, well drained by ravines.

It is on the through, and now motorable, road Chakwál-Injra.

WAH.

About a mile from Hasan Abdál on the Pindi side of the Grand Trunk Road, and half a mile down side road leading south and west, there are the ruins of a Mughal Sarai and garden, said to have been a "*faródgah*," or halting place, built by the Emperor Akbar for use on his journeys to and from Kashmir, at the foot of what must have been then a shade-giving knoll. There issue clear cool springs of limpid-water: and it may well be, as legend has it, that the place takes its name from a delighted exclamation "Wah! Wah!" of the Emperor when the eye of his imagination first rested on the beauty of the site.

The Sikhs destroyed the building: and took what was valuable to Amritsar. Custody of the building and the garden was given after the Mutiny to Sardar Muhammad Hayat: and it has remained with the family ever since on the understanding that the "ancient monument" be preserved: and made available for the reasonable visits of the public.

Colonel Cracroft thus describes it: "Time has left nothing but the ruins of buildings, parterres covered with grass and weed-choked reservoirs, a jungle of trees, a scene of desolation in the midst of vegetation."

It is now in excellent repair: and the system of the Mughal garden can be traced clearly. And there has returned to it its old time spirit of rest.

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